JMR/ma

PS/ML/Note 83-4 27.10.1983

1983 Drawing list for PS equipment

This is a list of the drawing numbers for the equipment in the 100 straight sections. The general reference is the list compiled by U. Jacob. Except for small changes foreseen for Jan. 1984, the overall situation is that existing in October 1983. Copies of drawings may usually be obtained from the PS/ML/ED section. Further information concerning the auxiliary magnets may be obtained by consulting the list compiled by L. Brouwers.

In order to facilitate additions and modifications, a loose-leaf binding has been adopted. The contents have been divided into an introductory section containing general straight section information and dimensions, and ten vacuum sectors. Updating of the file will be done periodically be distributing the modified sheets to the distribution list below.

Each of the 100 straight sections and various standard items are also stored in the Euclid C.A.D. data base. Scale drawings including perspective views are available from PS/ML/ED (P. Bourquin).

> P. Mann J.M. Roux

Distribution :

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× sur remargne de F.R. lui-mênde P.Bossand

MESS	SAGE 7/1483	
Pour: Mauneur	+ fram,	
Date:	Heure Time	
PENDANT VOTRE ABSENCE	DURING YOUR ABSENCE	
M		
de/of No. tél		
A téléphoné Telephoned	Rappellera Will call again	
Est venu Called	Rappelez s.v.p. Please call back	
Désire vous voir Wishes to see you	URGENT	
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vous parvis	pulever	
F. Rohner, par contre.		
SIS/H/366 Jalufature P. Banard		

PS/ML 27.10.1983

THIS NEW STRAIGHT SECTIONS HANDBOOK REPLACES ENTIRELY THE VERSION OF MARCH 1981.

ALL THE PAGES ARE TO BE CHANGED EXCEPT FOR THE GENERAL INFORMATION AT THE BEGINNING.

CERN / PS/ML.Oct.83 SB/slb –

1983/84 Drawing list for CPS straight section equipment

PS/ML/Note 83-4 27.10.1983

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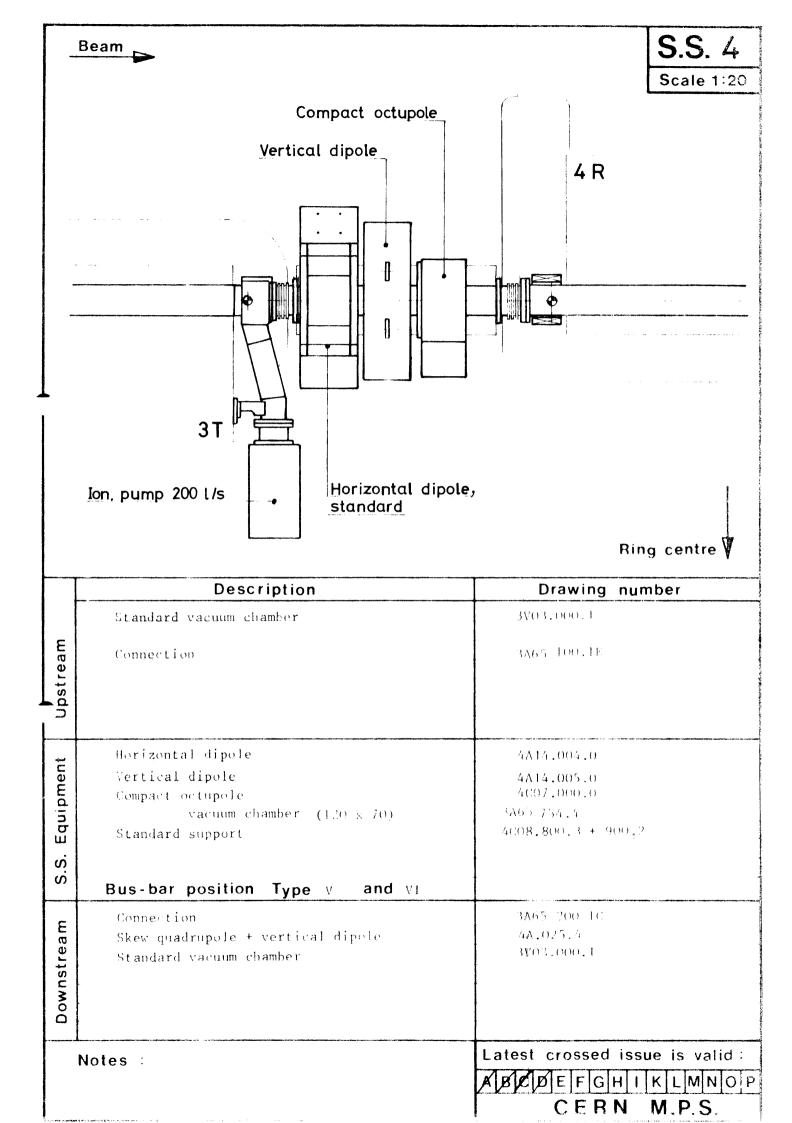
- A. Poncet
- Y. Renaud
- F. Röhner
- G. Rosset
- C. Steinbach
- H. Umstätter
- M. Van Rooy B. Szeless
- D. 5201033
- P. Zettwoch

1 2
SITUATION ACTUELLE FEUILLES S.D. LATEST STRAIGHT SECTION SITUATION
LAILJI JINMIUHI JEVHUN JILUAHUN

	Beam	S.S. 1 Scale 1:20 Dipole_horizontal
	Quadrupole d	<u>loublet</u> 1T Ring centre √
Par Winds 14.4.	Description Standard vacuum chamber	Drawing number 3V03.000.1
Upstream	Connection	3A65.100.1F
1	Vacuum chamber	3A65.775.3 & 3A65.773.2 pos. 4
S.S. Equipment	Wiggler Robinson Forizontal dipole Cuadrupole doublet Table Support Support Bus-bar position Type III and IV	4C26.001.1 4C14.004.0 4C10.000.0 4C08.800.3 4C08.907.3 3S.001.4
Downstream	Connection Standard vacuum chamber	3A65.200.1C 3V03.000.1
		Latest crossed issue is valid : ABCDEFGHIKLMNOP CERN M.P.S.

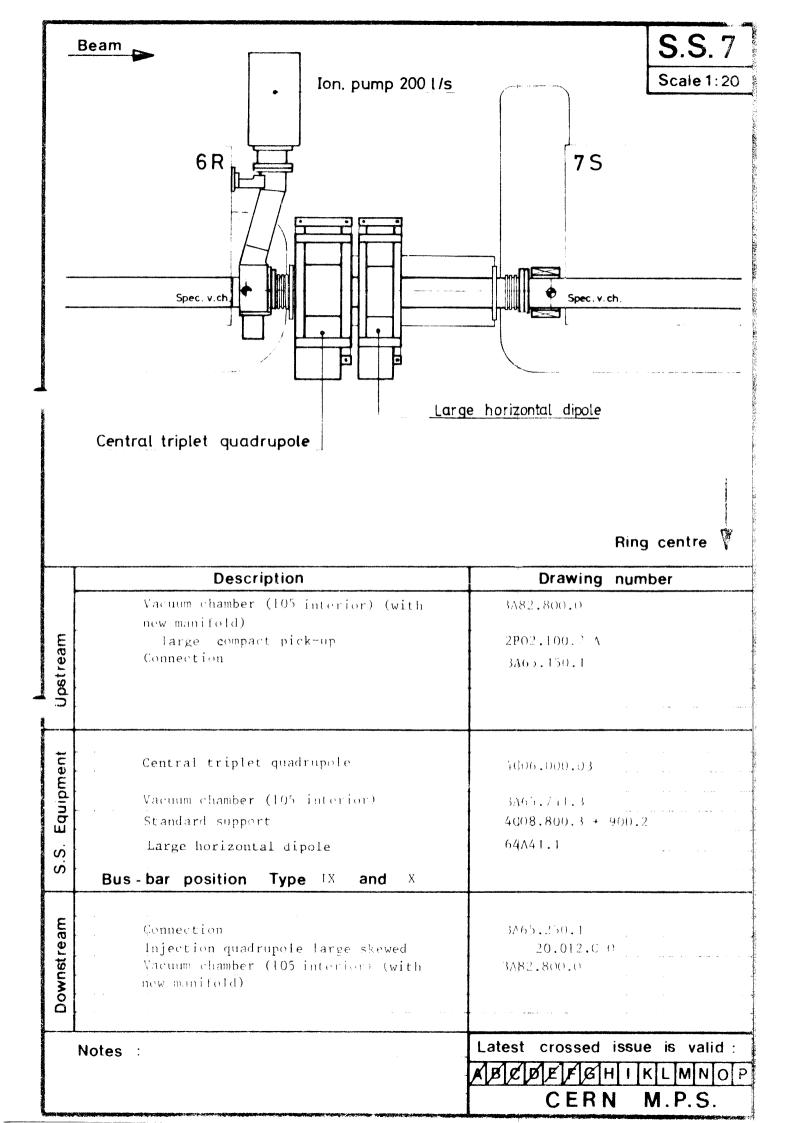
	Beam	S.S. 2 Scale 1:2
	compact sextupole injection sextupole standard	
	Description Standard vacuum chamber	Drawing numbe 3V03.000.1
Upstream	Connection	3A65.100.1F
S. Equipment	Compact sextupole Standard injection sextupole Standard support	4C.013.3 4C05.000.1 4C08.800.3 + 900.2
S.S	Bus-bar position Type XI and XII	
itream	Connection Standard vacuum chamber	3A65.200.10 3V03.000.1
Downstre		

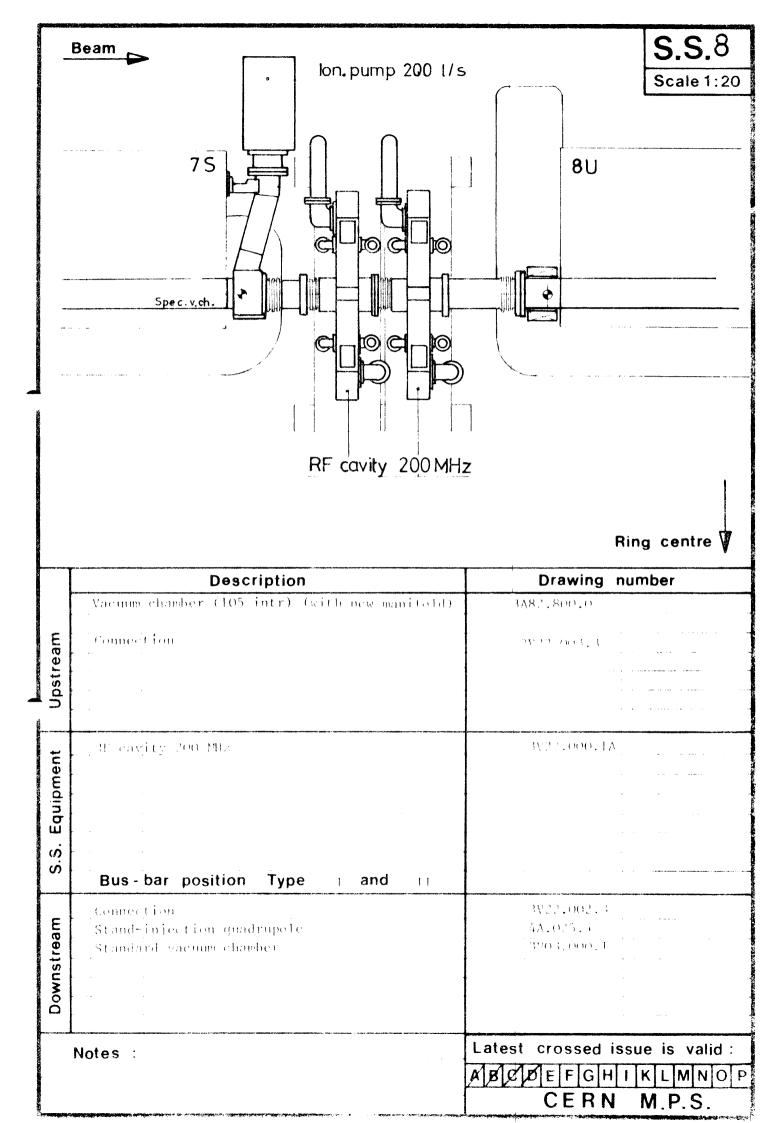
	Beam		S.S. 3 Scale 1:20
	2U Horizontal dipol standard		
			g centre
	Description Standard vacuum chamber	Drawing nun 3V03.000.1	nbe
am	Standard compact pick up Connection	2P02.100.0A [*] 3A65.100.1L	
Upstream			
Equipment	Eprizontal dipole Standard vacuum chamber Standard support	4A14.004.0 3A65.733.4 4C08.800.3 + 900.2	
S. Eq			
S.S	Bus-bar position Type χ_1 and χ_{11}		
Downstream	Connection Skew quadrupole + vertical dipole Standard vacuum chamber	4A.025.4	
	Notes :	Latest crossed issu ABCDEFGHII CERN	



	Beam	S . S .5 Scale 1:20
		act sextupole
	quadrupole kick enhancement Horizontal_dij standard	pole Ring centre ♥
	Description	Drawing number
Upstream	Standard vacuum chamber Standard compact pick up Connection	3V03.000.1 2P02.100.A* 3A65.100.1E
S.S. Equipment	Quadrupole kick enhancement Compact sextupole Horizontal dipole Vacuum chamber (inconcl) Standard support Bus-bar position Type 1 and 11	4C19.000.1A 4C.013.3 4A14.004.0 3A65.765.4 4C08.800.3 + 900.2
Downstream	Connection Standard injection quadrupole Standard vacuum chamber	3A65.200.1C 4A.024.0 3V03.000.1
	Notes :	Latest crossed issue is valid : ABCDEFGHIKLMNOF CERN M.P.S.

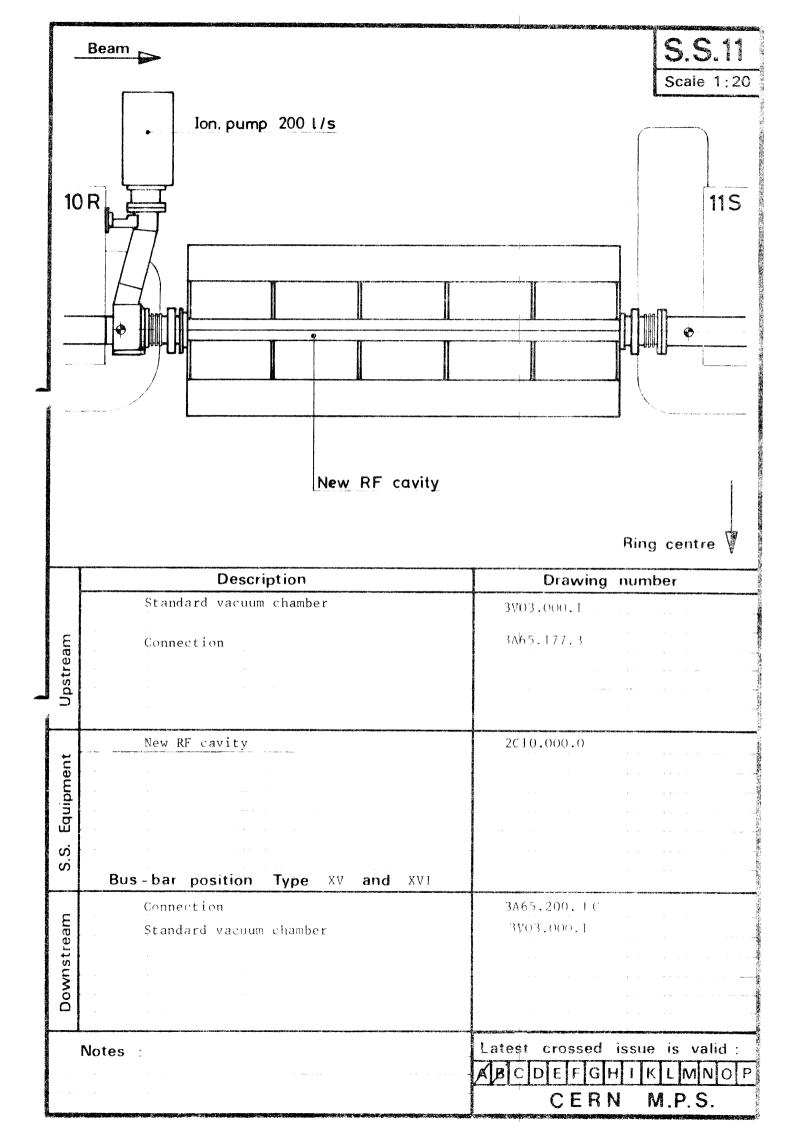
		no an shandi tan na bashi tan ingani kanga na kanga na kanga kanga kanga kanga kanga kanga kanga kanga kanga k	S.S.6
	Turbomolecular_pump THP 900		Scale 1:20
5		RF cavity 200 MH	6 R Spec. v.ch.
	Description	Drawing	number
	Standard vacuum chumber	3/(8.000.1	
Upstream	Connection		
	RF covity 200 MBz	B An a second contract of the second second An and An and	n 4 v = () - 2007 13 f v 1815 v 201 10 f 1610 1912 a.g. 1912 () - 201 () -
S.S. Equipment			
Downstream	Bus-bar position Type VU and VIII Connection Large injection quadrupel. Vacuum chamber (Prefut second second manufacte)	3V.11, 004, 3 118, 104, 1-B 3A42, 800, 0	
	Notes	Latest crossed i ABAAAE	IKLMNOP

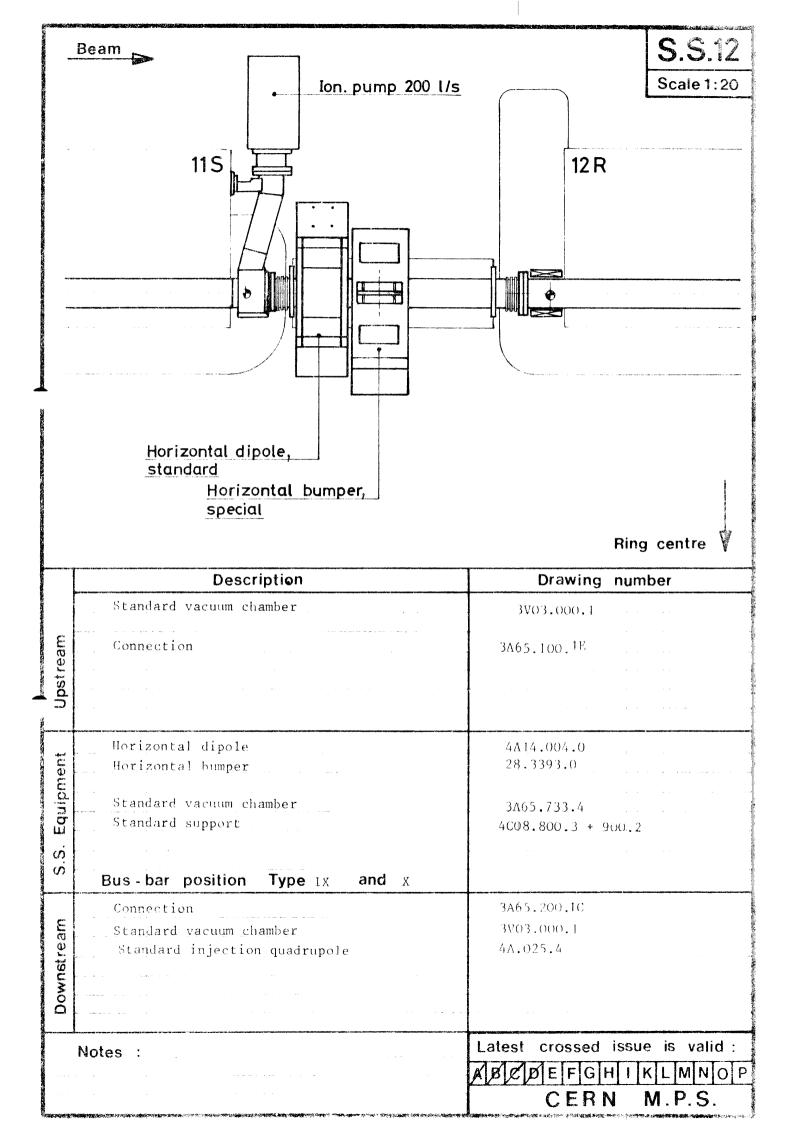


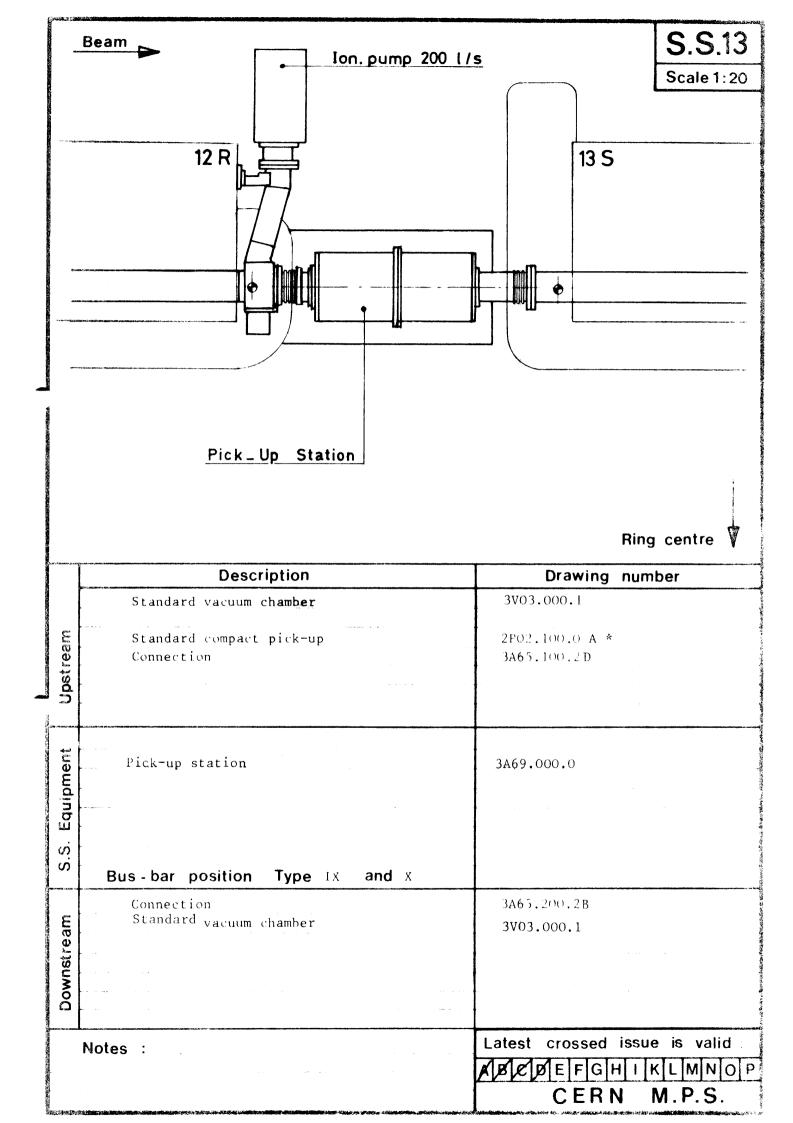


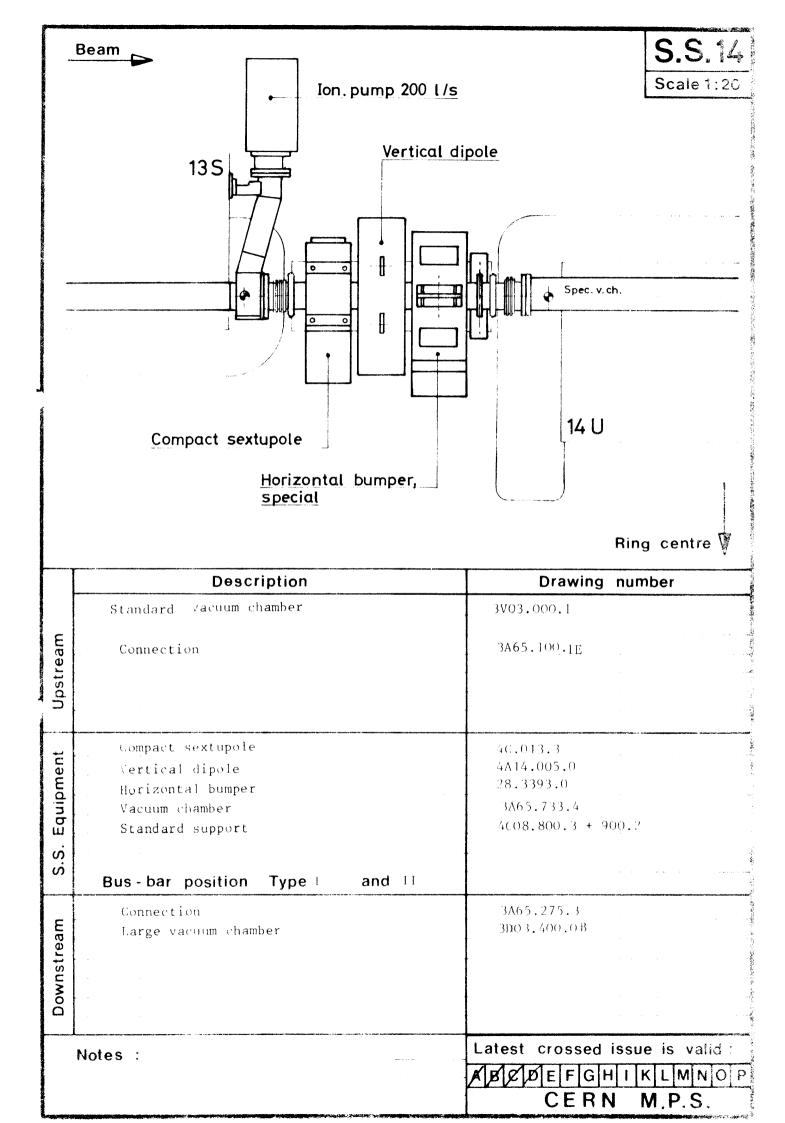
-	Beam	<u>/s</u>	S.S . 9
			Scale 1:20
	Cotinuous Transfer	Ion pump 40	<u>00 l/s</u>
		Rin	g centre V
	Description	Drawing nur	nber
Upstream	Standard vacuum chamber Connection	3V03.000.1 3A65.100.1E	
np: Up:			
	Continuous transfer	2A41.000.0	
S. Equipment		2A41.000.0	
		2A41.000.0	
S.S. Equipment		2A41.000.0 3A65.200.1C 4A.024.0 3V03.000.1	
S. Equipment	Bus-bar position Type XI and XII Connection Standard injection quadrupole	3A65.200.1C 4A.024.0	
S.S. Equipment	Bus-bar position Type XI and XII Connection Standard injection quadrupole	3A65.200.1C 4A.024.0 3V03.000.1 Latest crossed issu	
S.S. Equipment	Bus-bar position Type XI and XII Connection Standard injection quadrupole Standard vacuum chamber	3A65.200.1C 4A.024.0 3V03.000.1 Latest crossed issu	e is valid : KLMNOP M.P.S.

	Beam 🍃	S.S.	. 10
		Scale	1:20
-		10 R	
	9 T Ion. pump 200 I /s	Ring centr	e
	Description	Drawing number	
Upstream	Standard vacuum chamber Standard compact pick-up Connection	3VØ3.000.1 2PC2.100.0 A * 3A65.100.1E	
S.S. Equipment	Transformer Standard support	3V29.000.0 4CC8.800.3 + 900.2	
ownstream 5	Bus-bar position Type v and VI Connection Standard injection quadrupole Standard vacuum chamber	3A65,200.1 C 4A.024.0 3V03.000.1	
	Notes :	Latest crossed issue is va ABCBEFGHIKLM CERN M.P.S	NOP

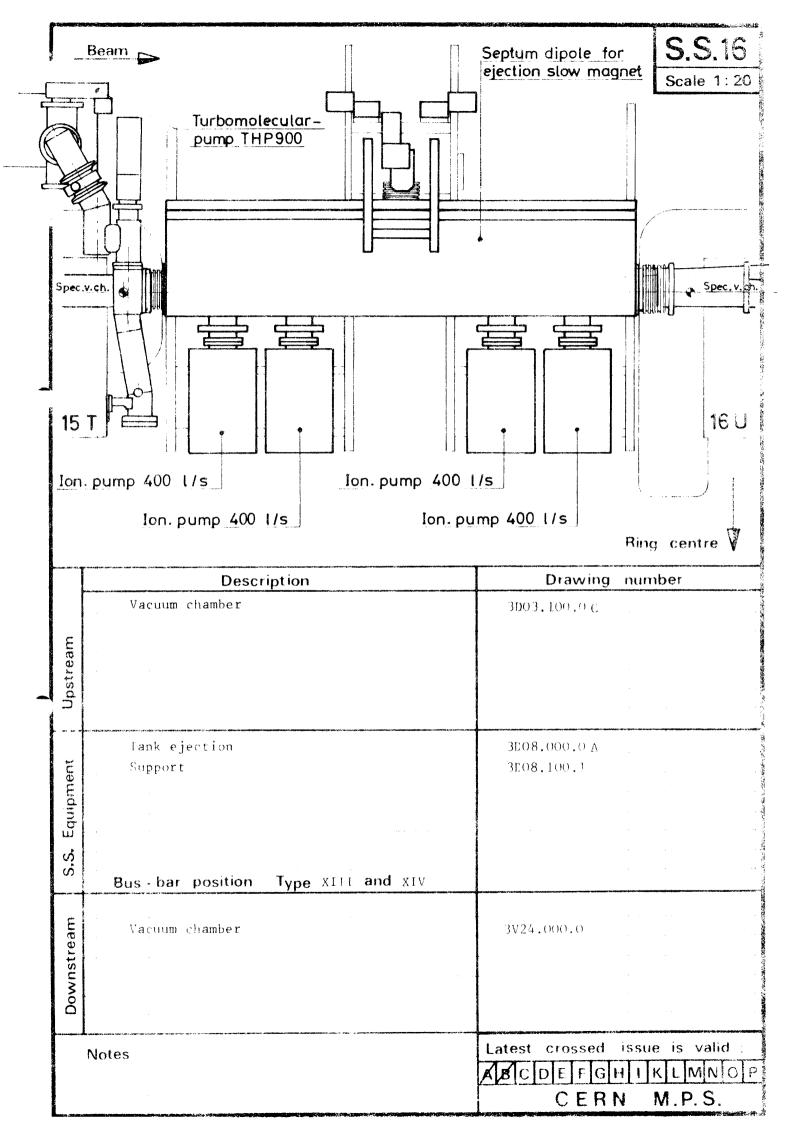








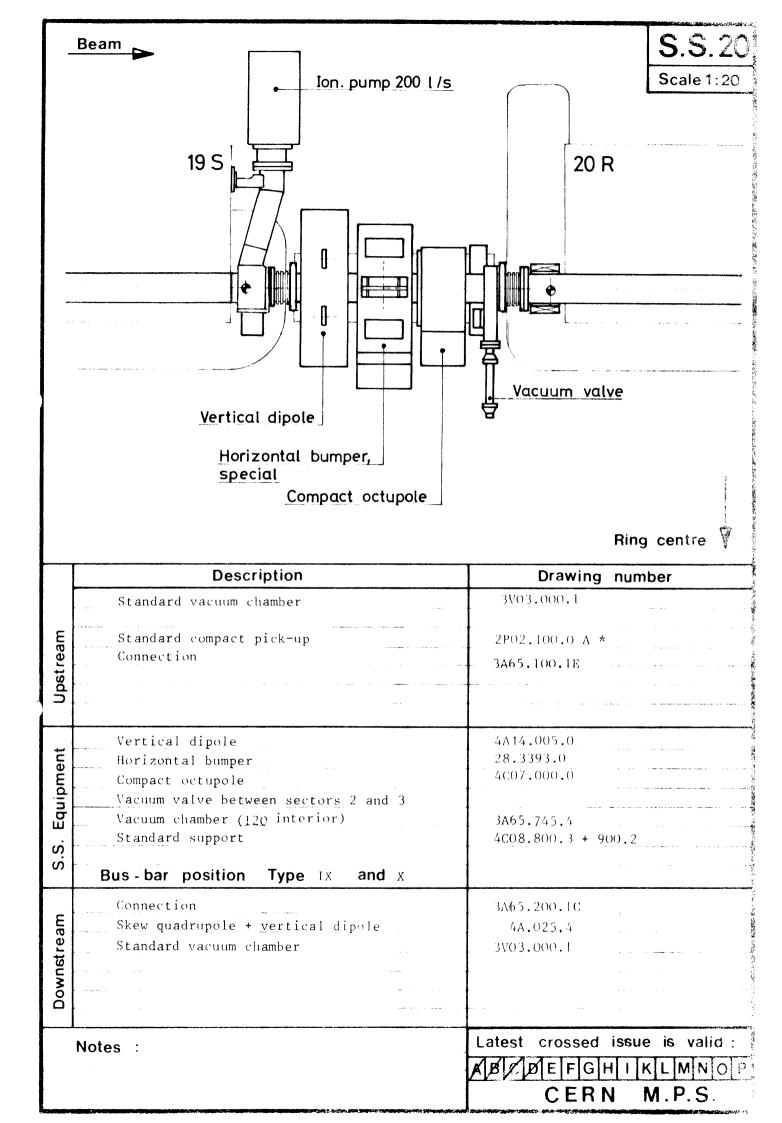
-	Beam	S.S.15
	Side triplet quadrupole	Scale 1:20
	Injection sextupole, large	
	Large horizontal dipole	
	Spec.v.ch.	Spec. v.ch.
-	─────────────────┦╎ <u>──</u> ╜┉╟┍┥┝──┤┝╘╾──═╡╟╫┯┤┝──	
		15 T
	Ion. pump 200 L/s	
		Ring centre 🕅
<u>}</u>	Description	Drawing number
	Large vacuum chamber	3D03.400.0B
eam	Large compact pick-up	2P02.100.2 A 3A65.190.1
Upstream	Connection	
snt	Large injection sextupole Side triplet quadrupole	64A41.1
Equipment	Large vacuum chamber	4C09.100.1 3A65.744.3
Equi	Standard support Large horizontal dipole	4C08.800.3 + 900.2 4C12.000.1
S.S.		
	Bus-bar position Type XI and XII	
am	Connection Large vacuum chamber	3A65.290.1A 3D03.100.0C
Downstream		
nwo		
	Notes :	Latest crossed issue is valid :
*		KBCDEFGHIKLMNOP



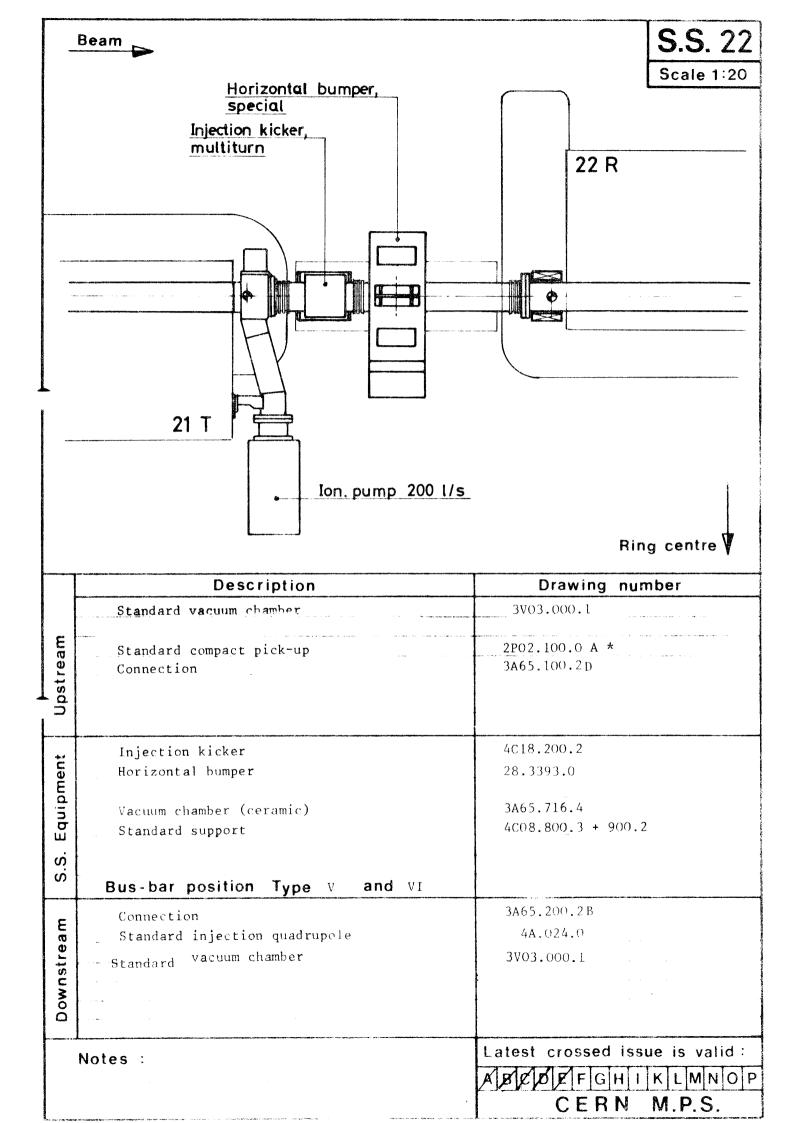
		Beam	S.S.17 Scale 1:20
		Spec: v. ch 16 U Large_pick_up	Ejection 16 Spec v. ch. 17 T Ring centre
ſ		Description	Drawing number
	Upstream	Large vacuum chamber Connection	3V24.000.0 3A65.150.1
	S.S. Equipment	Large vacuum chamber Large compact pick-up Standard support Bus-bar position Type XI and XII	3A65.742.2 2P02.100.2 4C08.800.3 + 900.2
	Downstream	Connection Large injection quadrupole Large vacuum chamber	3A65.250.1 118.104.1 3D04.400.0D
	1	Notes :	Latest crossed issue is valid : KBCDEFGHIKLMNOP CERN M.P.S.

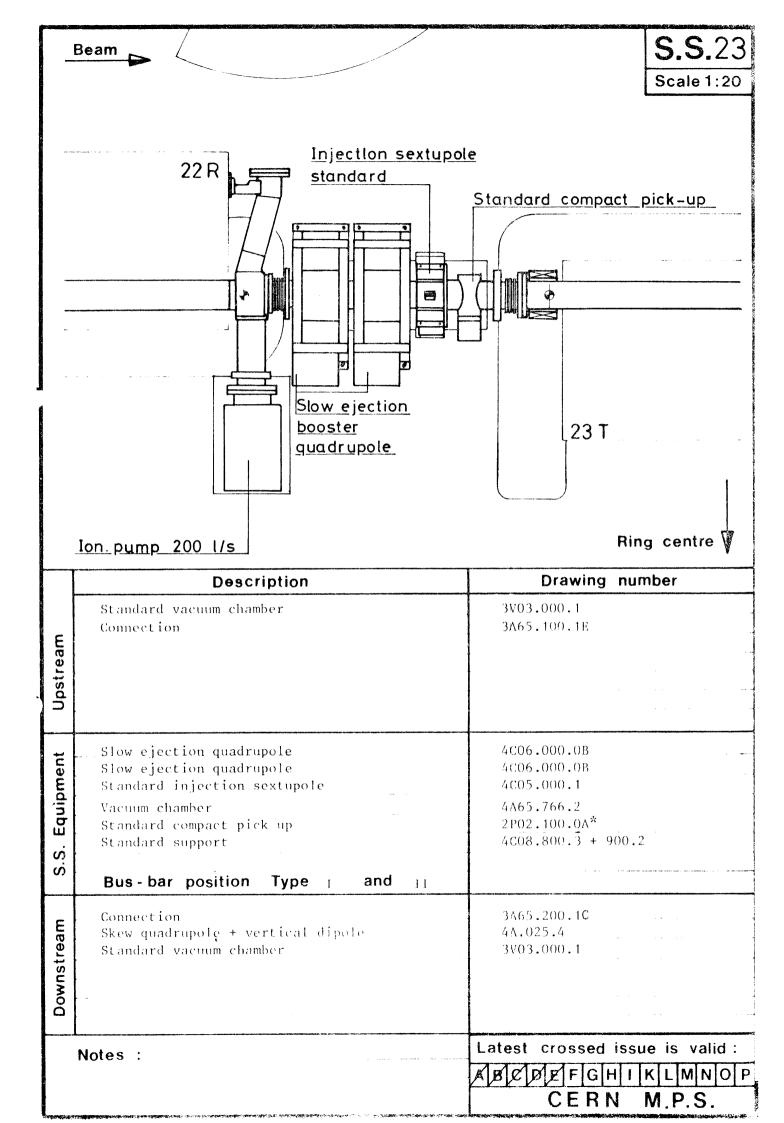
	Beam Ejec	tion 16
-	Spec. v. In Spec. v. In 17 T Injection Dipole Ion. pump 200 I /s	
	Description	Ring centre 🦉
	Description Large vacuum chamber	Drawing number 3004,400,0p
Upstream	Phase pick-up Connection	2102.100.0 A *
S.S. Equipment	Standard vacuum chamber Standard support Compact sextupole Injection dipole Bus-bar position Type XI and XII	3A65.733.4 4@08.800.3 + 900.2 4C.013.3 4N14.005.0
Downstream	Connection Standard injection quadrupole Standard vacuum chamber	3A65.200.1C 4A.024.0 3VQ3.000.1
	Notes :	Latest crossed issue is valid : BPPFGHIKLMNOP CERNM.P.S .

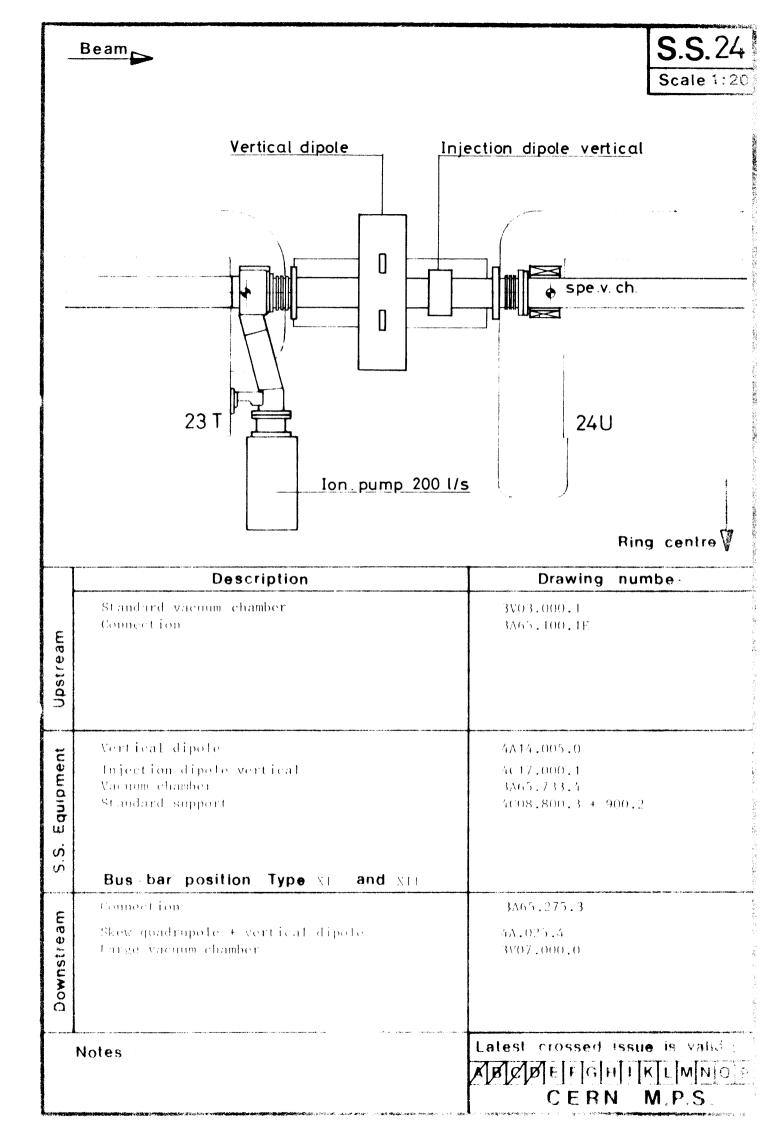
—	Beam -	S.S . 19
		Scale 1:20
	Compact sextupole	
	Injection sextupole, standard	19 S Standard doublet quadrupole
		Ring centre 🕅
	Description	Drawing number
	Description Standard vacuum chamber	
eam	Standard vacuum chamber Connection	Drawing number
ostream	Standard vacuum chamber	Drawing number 3V03.000.1
Upstream	Standard vacuum chamber Connection	Drawing number 3V03.000.1
	Standard vacuum chamber Connection	Drawing number 3V03.000.1 3A65.100 1E
	Standard vacuum chamber Connection Standard injection sextupole Compact sextupole	Drawing number 3V03.000.1 3A65.100 1E 4C05.000.1 4C.013.3
	Standard vacuum chamber Connection Standard injection sextupole Compact sextupole Standard doublet quadrupole	Drawing number 3V03.000.1 3A65.100 1E 4C05.000.1
Equipment Upstream	Standard vacuum chamber Connection Standard injection sextupole Compact sextupole	Drawing number 3V03.000.1 3A65.100 1E 4C05.000.1 4C.013.3 4C10.000.0
.S. Equipment	Standard vacuum chamber Connection Standard injection sextupole Compact sextupole Standard doublet quadrupole Inconel comm chamber	Drawing number 3V03.000.1 3A65.100_1E 4C05.000.1 4C05.000.1 4C05.000.1 4C05.000.1 5A65.265.4
. Equipment	Standard vacuum chamber Connection Standard injection sextupole Compact sextupole Standard doublet quadrupole Inconel chamber Standard support	Drawing number 3V03.000.1 3A65.100_1E 4C05.000.1 4C05.000.1 4C05.000.1 4C10.000.0 5A65.765.4
S.S. Equipment	Standard vacuum chamber Connection Standard injection sextupole Compact sextupole Standard doublet quadrupole Inconel chamber Standard support	Drawing number 3V03.000.1 3A65.100_1E 4C05.000.1 4C05.000.1 4C05.000.1 4C10.000.0 5A65.765.4
S.S. Equipment	Standard vacuum chamber Connection Standard injection sextupole Compact sextupole Standard doublet quadrupole Inconel doublet quadrupole Lnconel doublet quadrupole Standard support Bus-bar position Type V and VI Connection Skew quadrupole + vertical dipole Vacuum chamber	Drawing number $3V03.000.1$ $3A65.100.1E$ $4C05.000.1$ $4C05.000.1$ $4C.013.3$ $4C10.000.0$ $3A05.765.4$ $4C08.800.3 + 900.2$ $3A05.300.1C$ $4A.025.4$ $3V03.000.1$
.S. Equipment	Standard vacuum chamber Connection Standard injection sextupole Compact sextupole Standard doublet quadrupole Inconel down chamber Standard support Bus-bar position Type V and VI Connection Skew quadrupole + vertical dipole Vacuum chamber	Drawing number 3V03.000.1 3A65.100_1E 4C05.000.1 4C05.000.1 4C05.000.1 4C05.000.1 4C05.000.1 4C05.000.1 4C05.000.1 4C05.000.1 3A65.100_1E 3A65.100_1E 3A65.100_1E 3A65.765.4 4C08.800.3 + 900.2 3A65.200.1C 4A.025.4
Downstream S.S. Equipment	Standard vacuum chamber Connection Standard injection sextupole Compact sextupole Standard doublet quadrupole Inconel chamber Standard support Bus-bar position Type V and VI Connection Skew quadrupole + vertical dipole Vacuum chamber	Drawing number $3V03.000.1$ $3A65.100.1E$ $4C05.000.1$ $4C05.000.1$ $4C05.000.1$ $4C05.000.1$ $4C05.765.4$ $4C08.800.3 + 900.2$ $3A0.2.200.1C$ $4A.025.4$ $3V03.000.1$
Downstream S.S. Equipment	Standard vacuum chamber Connection Standard injection sextupole Compact sextupole Standard doublet quadrupole Inconel - Denum chamber Standard support Bus-bar position Type V and VI Connection Skew quadrupole + vertical dipole Vacuum chamber	Drawing number $3V03.000.1$ $3A65.100$ 1E $4c05.000.1$ $4c05.000.1$ $4c.013.3$ $4c10.000.0$ $3A65.765.4$ $4c08.800.3 + 900.2$ $3A9.3.000.1$ $3A9.3.000.1$

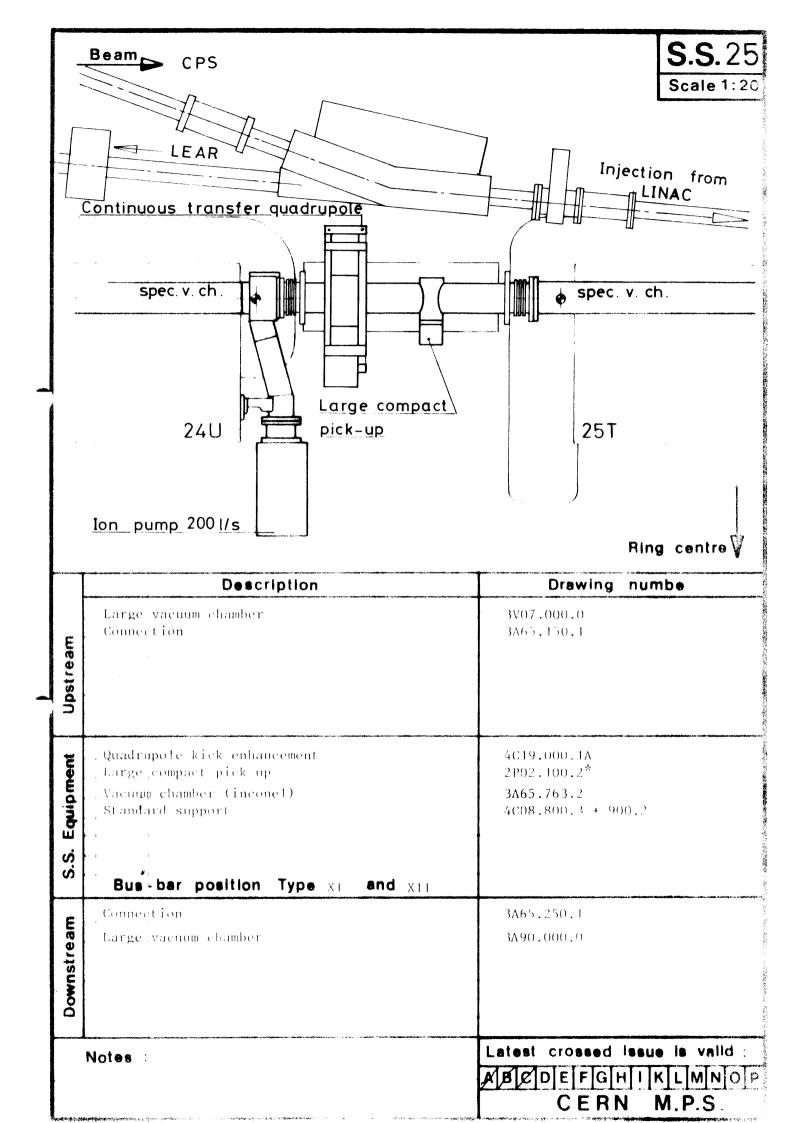


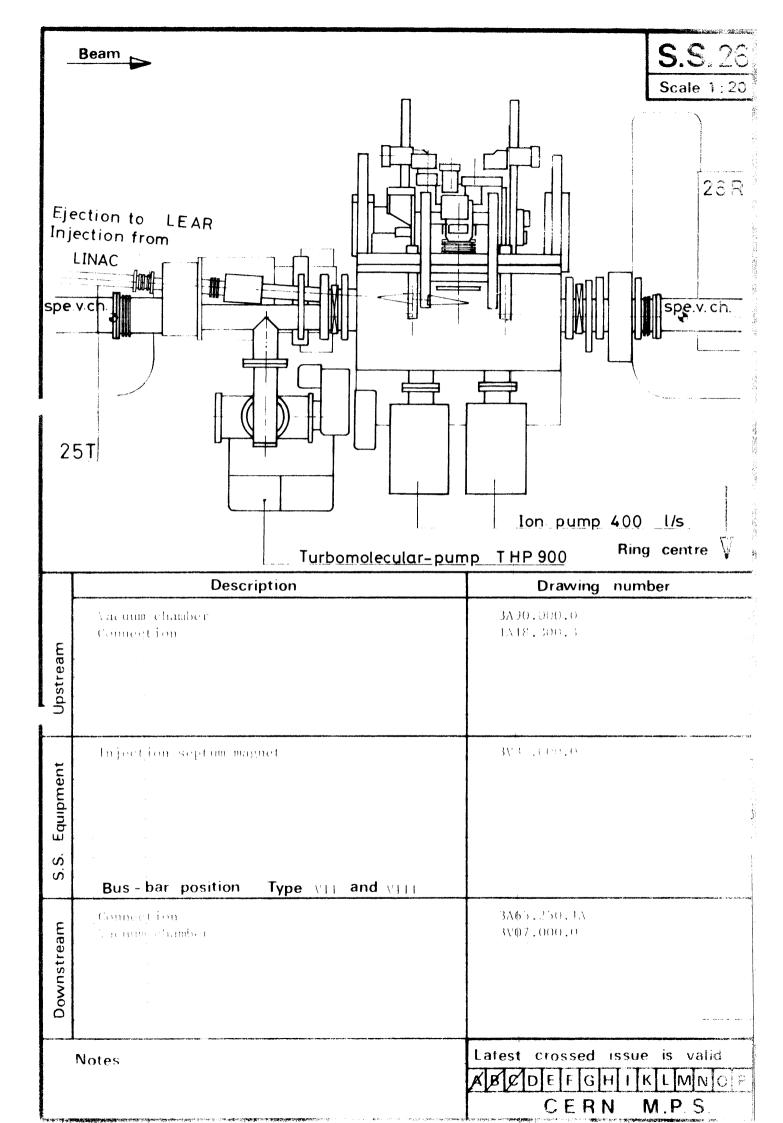
	Beam >	S.S.21
	Ion Pump 400 l/s Multi	Scale 1:20 pulsing project
20		
Cc	ontinuous transfert	
	Ion pump 400 1/s	Ring centre
	Description	Drawing number
	(tandard manne she had	21/02 000 1
1	Standard vacuum chamber	3V03.000.1
u	connection	2A41.011.2
Upstream	-	
<u> </u>	-	2A41.011.2
<u> </u>	connection	2A41.011.2
<u> </u>	connection outinuous transfer & multi pulsing project	2A41.011.2
Equipment Upstream	connection	2A41.011.2
S. Equipment	connection outinuous transfer & multi pulsing project	2A41.011.2 2A41.000.1
Equipment	connection outinuous transfer & multi pulsing project	2A41.011.2
S.S. Equipriment	connection outinuous transfer & multi pulsing project Bus-bar position Type III and IV Connection	2A41.011.2 2A41.000.1 2A41.025.2
S.S. Equipriment	connection outinuous transfer & multi pulsing project Bus-bar position Type III and IV	2A41.011.2 2A41.000.1
S. Equipment	connection outinuous transfer & multi pulsing project Bus-bar position Type III and IV Counection Stand.injection quadrupole	2A41.011.2 2A41.000.1 2A41.025.2 4A.024.0
Downstream S.S. Equipment	connection ontinuous transfer & multi pulsing project Bus-bar position Type III and IV Counection Stand.injection quadrupole Stand.vacuum chamber	2A41.011.2 2A41.000.1 2A41.025.2 4A.024.0
Downstream S.S. Equipment	connection outinuous transfer & multi pulsing project Bus-bar position Type III and IV Counection Stand.injection quadrupole	2A41.011.2 2A41.000.1 2A41.025.2 4A.024.0 3V03.000.1

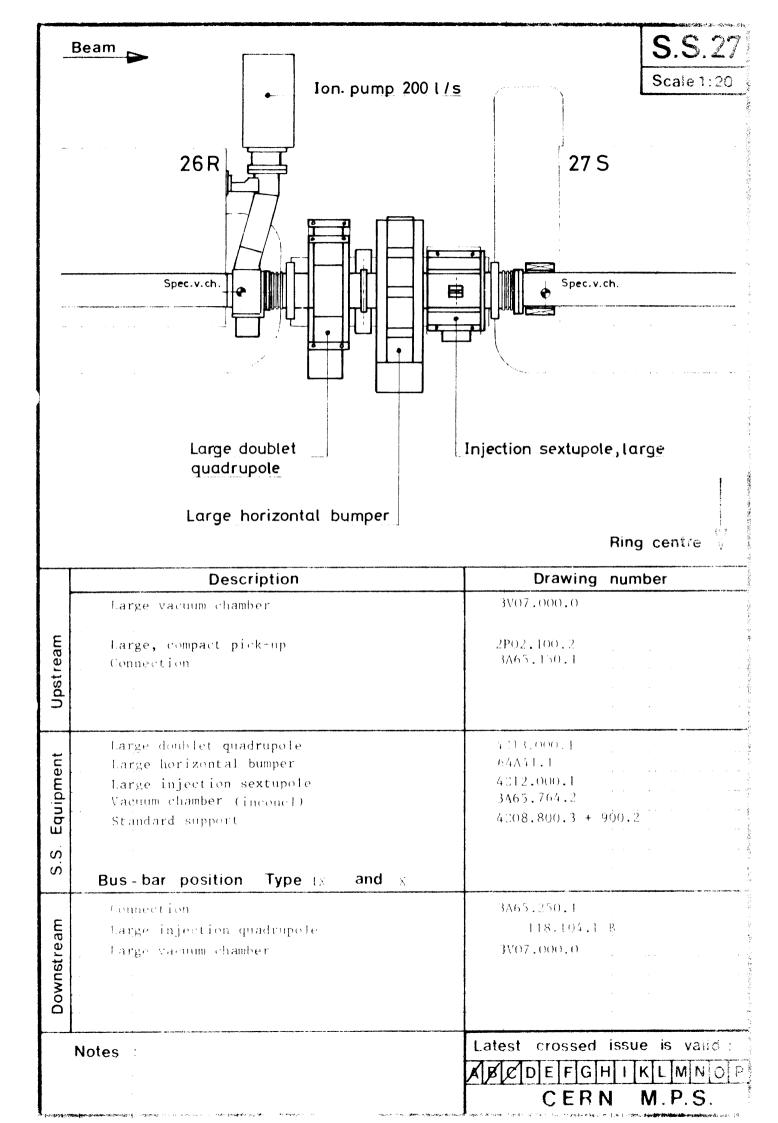


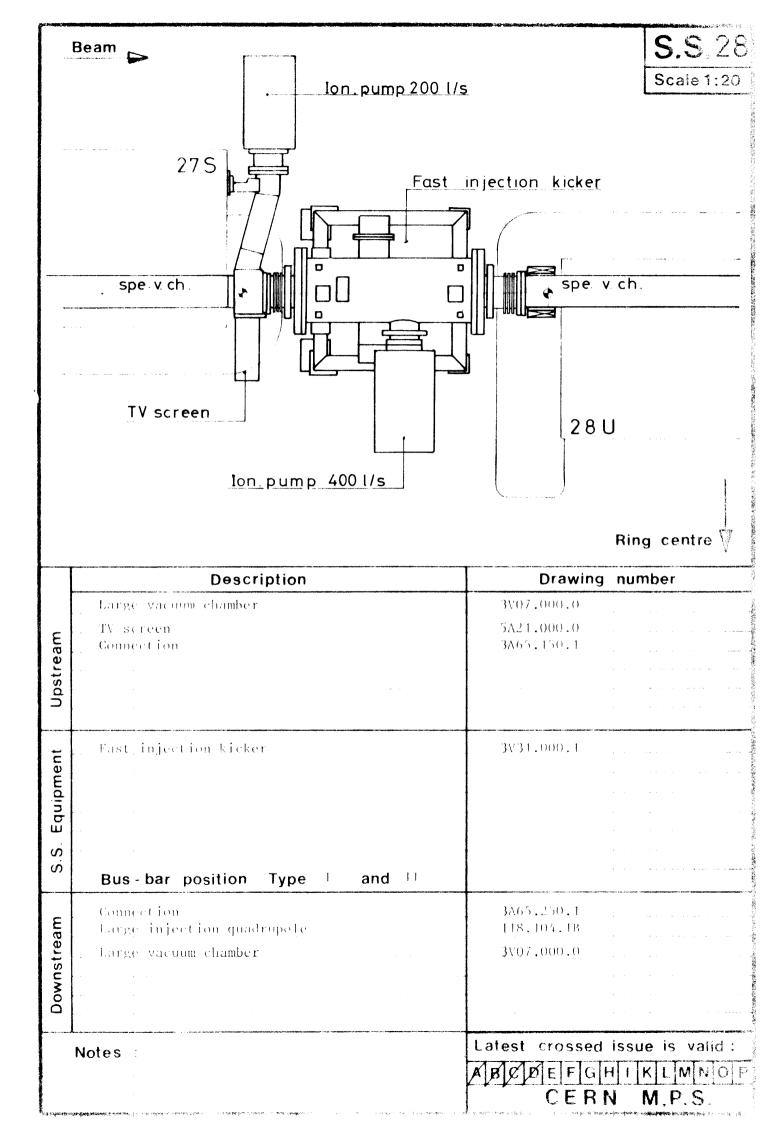








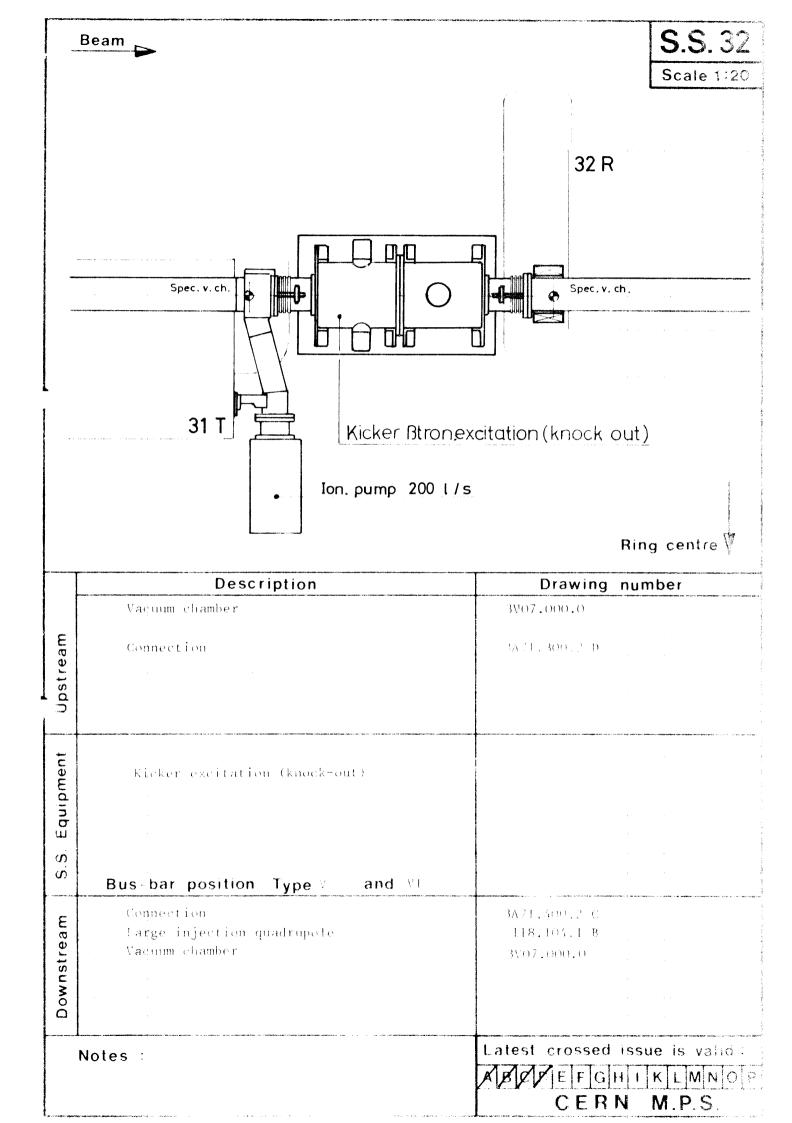


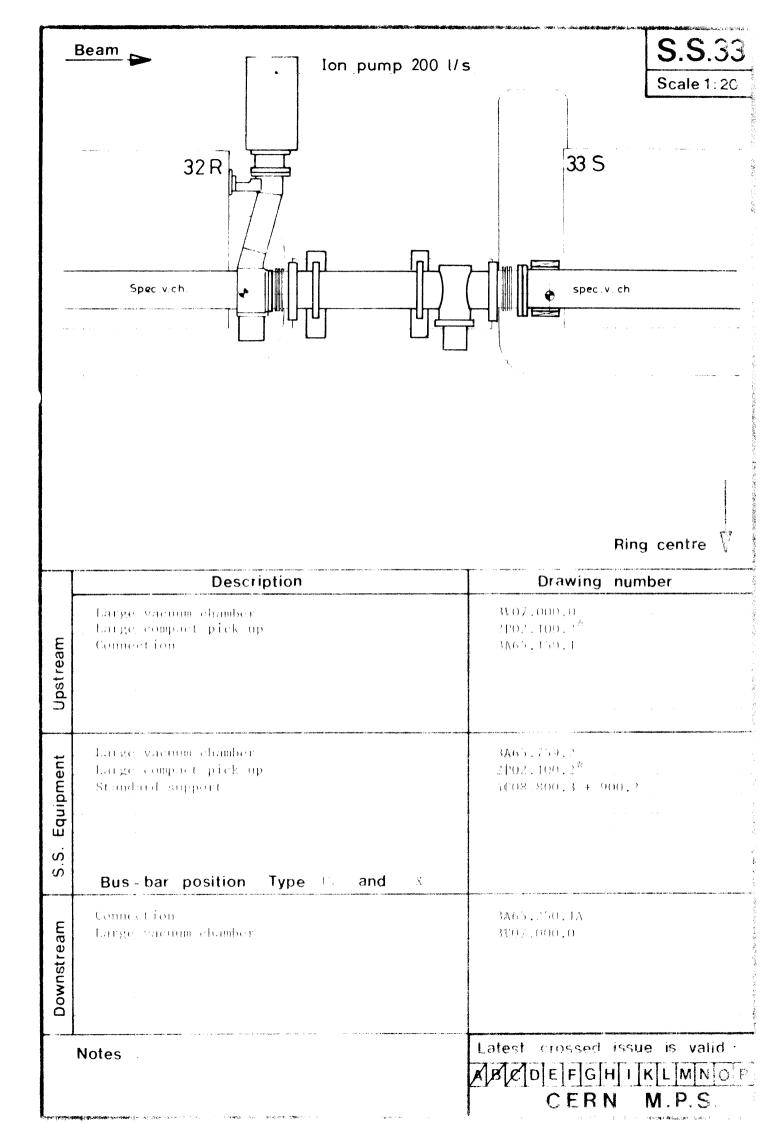


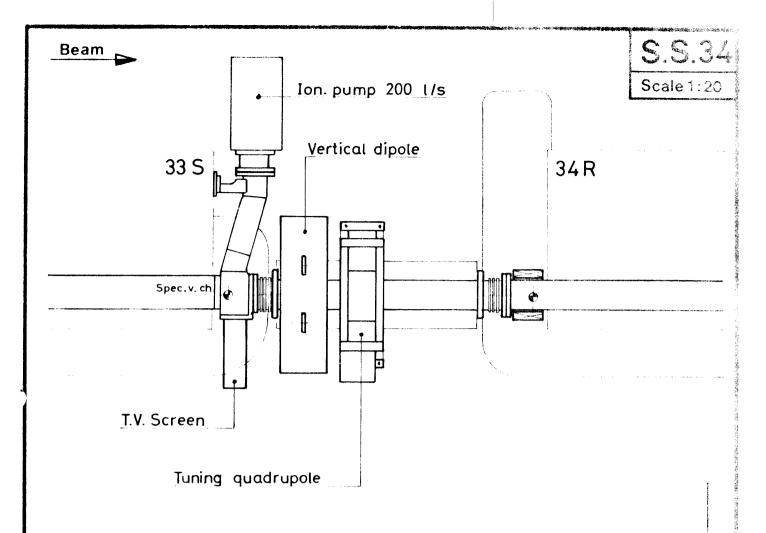
	Beam	S.S. 29 Scale 1:20
	Large doublet quadrupole	
	Spec.v.ch.	Spec. v. ch. 29 T
		Ring centre
•	Description Large vacuum chamber	Drawing number 3V07.000.0
Upstream	Connection	3A65.150.1
S.S. Equipment	Large doublet quadrupole Large vacuum chamber (inconcl) Standard support Bus-bar position Type NF and X11	4C13.000.1 3λ65.764.2 4C08.800.3 + 900.2
Downstream	Connection Injection quadrupole large skewed Carge vacuum chamber	3A65.250.1 20.012.C 0 3V07.000.0
	Notes :	Latest crossed issue is valid : ABCDEFGHIKLMNOF CERN M.P.S.

Beam	S.S. 30	
	Scale 1:20	
Large pick-up		
TV-Screen	30R	
29 T Injection kicker multiturn	e	
Ion_pump_200_I/s Ring centre		
Description Drav	ving number	
Large vacuum chamber 3007.000 TV screen 5A21.000	.0	
Large vacuum chamber3V07.000TV screen5A21.000Connection3A96.006Injection kicker multiturn1A.005.1Vertical dipole4C17.000Large compact pick up2F02.100Vacuum chamber3A96.000Standard support4C08.800Vacuum valve between sectors 4 and 5	.0	
Large vacuum chamber3V07.000TV screen5A21.000Connection3A96.006Injection kicker multiturn14.005.1Vertical dipole4C17.000Large compact pick up2F02.100Vacuum chamber3A96.000Standard support4C08.800Vacuum valve between sectors 4 and 5	$\begin{array}{c} 0 \\ 0 \\ 0 \\ 2 \\ \end{array}$	
Large vacuum chamber 3407.000 TV screen 5A21.000 Connection 3A96.006 Injection kicker multiturn 14.005.1 Vertical dipole 4C17.000 Large compact pick up 2F02.100 Vacuum chamber 3A96.000 Standard support 4C08.800 Vacuum valve between sectors 4 and 5 3A96.007 O Bus-bar position Type V and V1 Email Connection Injection quadrupole large skewed 20.012.0 Large vacuum chamber 3A96.007 Vacuum chamber 3A96.007 O Bus-bar position Type V and V1 Email Standard support Vacuum chamber 3A96.007 Standard support 3A96.007 Vacuum valve between sectors 4 and 5 Standard suport Vacuum chamber 3A96.007 Large vacuum chamber 3V07.000	$\begin{array}{c} 0 \\ 0 \\ 0 \\ 2 \\ \end{array}$	
Large vacuum chamber 3V07.000 TV screen 5A21.000 Connection 3A96.006 Injection kicker multiturn 1A.005.1 Vertical dipole 4C17.000 Large compact pick up 2F02.100 Vacuum chamber 3A96.000 Standard support 4C08.800 Vacuum valve between sectors 4 and 5 3A96.007 O Bus-bar position Type V and V1 E Connection 3A96.007 Injection quadrupole large skewed 20.012.0 Large vacuum chamber 3V07.000 Notes : Latest cro	$ \begin{array}{c} 0 \\ 0 \\ 2 \\ 2 \\ 1 \\ 2^{*} \\ 1 \\ 3 + 900.2 \\ \end{array} $	

Spec. v d Electrostatic septum dipole for ejection Spec. v d Image: spec. v d Jon, pump 400 t /s 31 T Jon, pump 400 t /s 31 T Rong centre Rong centre Vacoum chamber W(7,000,0) Vacoum chamber S(7,040,0)		Beam	500560-000000-0000000000000000000000000	S.S. 31 Scale 1:20
30 R Image: Sec. v. of the sec. v.		Ion. pump 200 L/s	ole for election	Scale 1, 20
Spec. v. d. Spec. v. d. Jon, pump 400 1 /s Spec. v. d. Jon, pump 400 1 /s Strong number Rung centre BUC7,000,0 Vacuum chamber Strong number Strong number Strong number Vacuum chamber Strong number Umggod Strong number Strong number Strong number Strong number </th <th></th> <th colspan="3">Electrostatic septum alpole for ejection</th>		Electrostatic septum alpole for ejection		
Ion. pump 400 L/s 31 T Ion. pump 400 L/s 31 T Bug centre 31 T Ring centre 31 T Vacoum chamber Notes Bus - bar position Type Lit Vacoum chamber SEP. 6 G1.01 Umontion SEP. 5818.2 Intervition SEP. 5818.2 <th>30</th> <th></th> <th></th> <th>m</th>	30			m
Ion, pump 400 1 /s Ring centre Description Drawing number Vacuum chamber Wt 7.000.0 Vacuum chamber Wt 7.000.0 Connection SHP.6431.2 Plectrostatic septum SHP.6431.0 Bus - bar position Type 111 and 19 Connection SHP.5838.2 Large injection quadrupole 118,103.1.8 Vacuum chamber 807,000.0 Notes : Latest crossed resue is valid	Spec			Spec. v. ch.
Description Drawing number Vacuum chamber WC7.000.0 Connection SEP.63519.2 Flectrostatic septum SEP.6351.0 Bus-bar position Type 111 and 1V Contection SEP.5838.2 Large injection quadrupole 118,100,1 B Vacuum chamber 307,000,0				ш З17
Vacuum chamber 3V(7,000,0 Connection 519,6350,2 Pression SEP.6351,0 Pression SEP.6351,0 Bus - bar position Type 111 and 1V Connection SEP.5838,2 Harge injection quadrupole H18,106,1 B Vacuum chamber St07,000,0 Notes Latest crossed resue is valid				Ring centre
Connection SUP_6359.2 Tueuding Flectrostatic septum Bus-bar position Type III and IV SEP.6351.0 Bus-bar position Type III and IV SEP.5838.2 Connection SEP.5838.2 Large injection quadrupole 118.105.1 B Vacuum chamber 3807.000.0 Notes Latest crossed resue is valid				
Flectrostatic septum SBP.6351.0 Bus-bar position Type III and IV SBP.5838.2 Bus-bar position quadrupole SBP.5838.2 Large injection quadrupole 118.104.1 B Vacuum chamber 3007.000.0 Notes : Latest crossed issue is valid Motes : Latest crossed issue is valid		Description	Drawing	number
Flectrostatic septum SBP.6351.0 Bus-bar position Type III and IV SBP.5838.2 Bus-bar position quadrupole SBP.5838.2 Large injection quadrupole 118.104.1 B Vacuum chamber 3007.000.0 Notes : Latest crossed issue is valid Motes : Latest crossed issue is valid				number
Bus - bar position Type 111 and 19 Bus - bar position Type 111 and 19 Connection SHP.5838.2 Large injection quadrupole 118.104.1 B Vacuum chamber 3V07.000.0 Notes Latest crossed resue is valid Mpt C D E F G H 1 K L M N O F	eam	Vacuum chamber Connection	3VC7.000.0	
Signal Bus - bar position Type and V Connection SHP.5838.2 Large injection quadrupole 118.104.1 B Vacuum chamber 3V07.000.0 Notes Latest crossed issue is valid Motes Latest crossed issue is valid	Upstream	Vacuum chamber Connection	3VC7.000.0	
Signal Bus - bar position Type and V Connection SHP.5838.2 Large injection quadrupole 118.104.1 B Vacuum chamber 3V07.000.0 Notes : Latest crossed issue is valid Notes : Latest crossed issue is valid		Vacuum chamber Connection 	3VC7.000.0 SEP.5344.2	
vi Bus-bar position Type III and IV Connection SHP.5838.2 Large injection quadrupole I18.104.1 B Vacuum chamber 3V07.000.0 Notes : Latest crossed issue is valid Notes : Latest crossed issue is valid		Vacuum chamber Connection Flectrostatic septum	3VC7.000.0 SEP.5344.2	
Connection SHP.5838.2 Large injection quadrupole 118.104.1 B Vacuum chamber 3V07.000.0 Notes Latest crossed issue is valid MCDEFGHIKLMNOFF	Equipment	Vacuum chamber Connection Flectrostatic septum	3VC7.000.0 SEP.5344.2	
Notes : Latest crossed issue is valid ABCDEFGHIKLMNOF	S. Equipment	Vacuum chamber Connection Flectrostatic septum	3VC7.000.0 SEP.5344.2	
A B C D E F G H I K L M N O F	S.S. Equipment	Vacuum chamber Connection Flectrostatic septum Bus-bar position Type III and IV Connection Large injection quadrupole Vacuum chamber	3VC7.000.0 SEP.5349.2 SEP.5351.0 SEP.5838.2 118.104.1 B	
	S.S. Equipment	Vacuum chamber Connection Flectrostatic septum Bus-bar position Type III and IV Connection Large injection quadrupole Vacuum chamber	3VC7.000.0 SEP.5349.2 SEP.5351.0 SEP.5838.2 118.104.1 B	

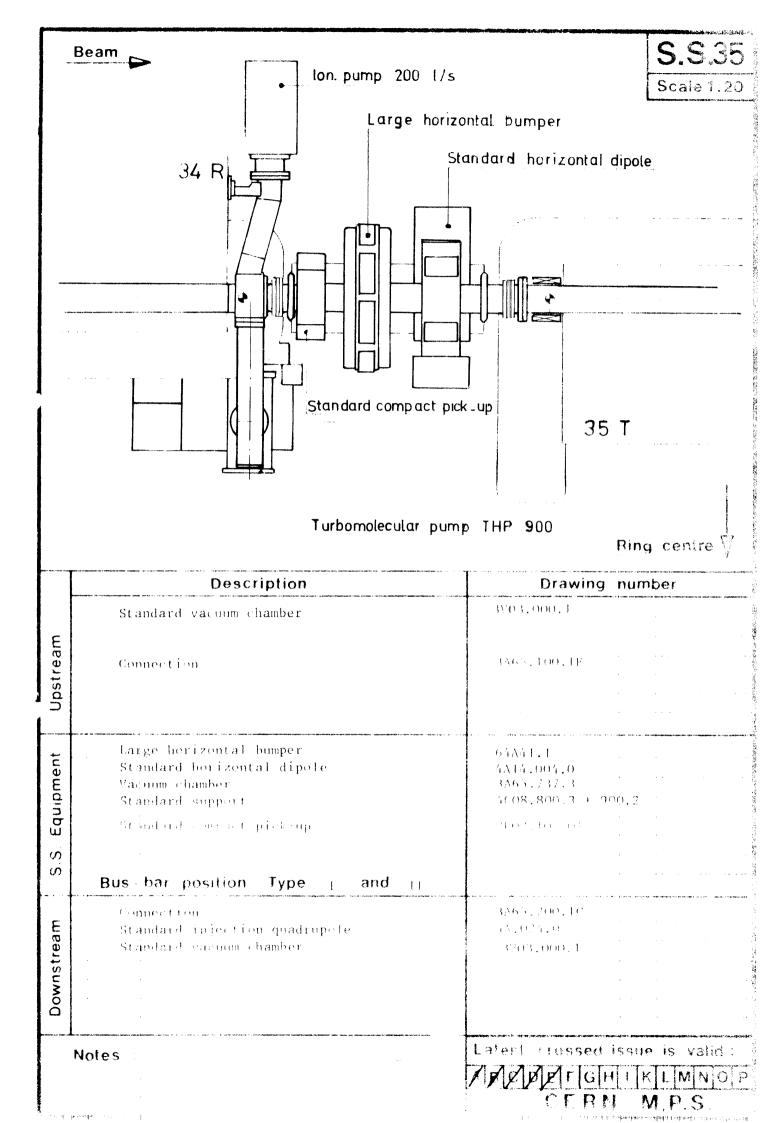




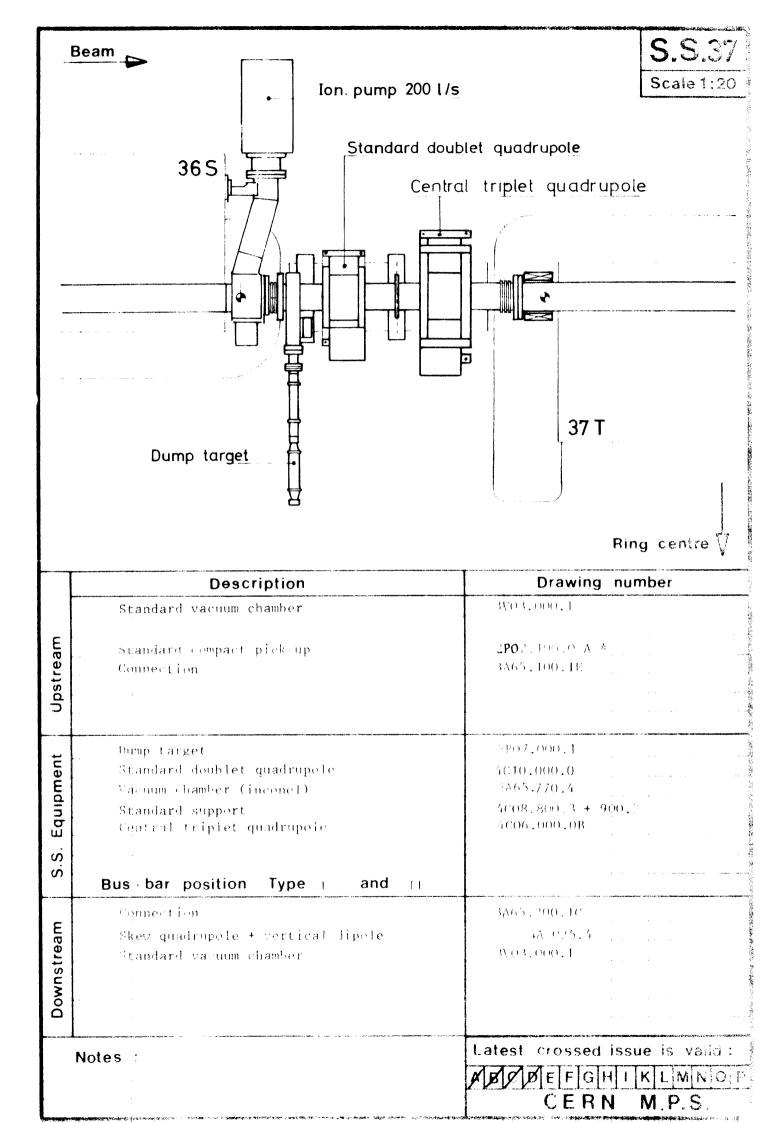


Ring centre

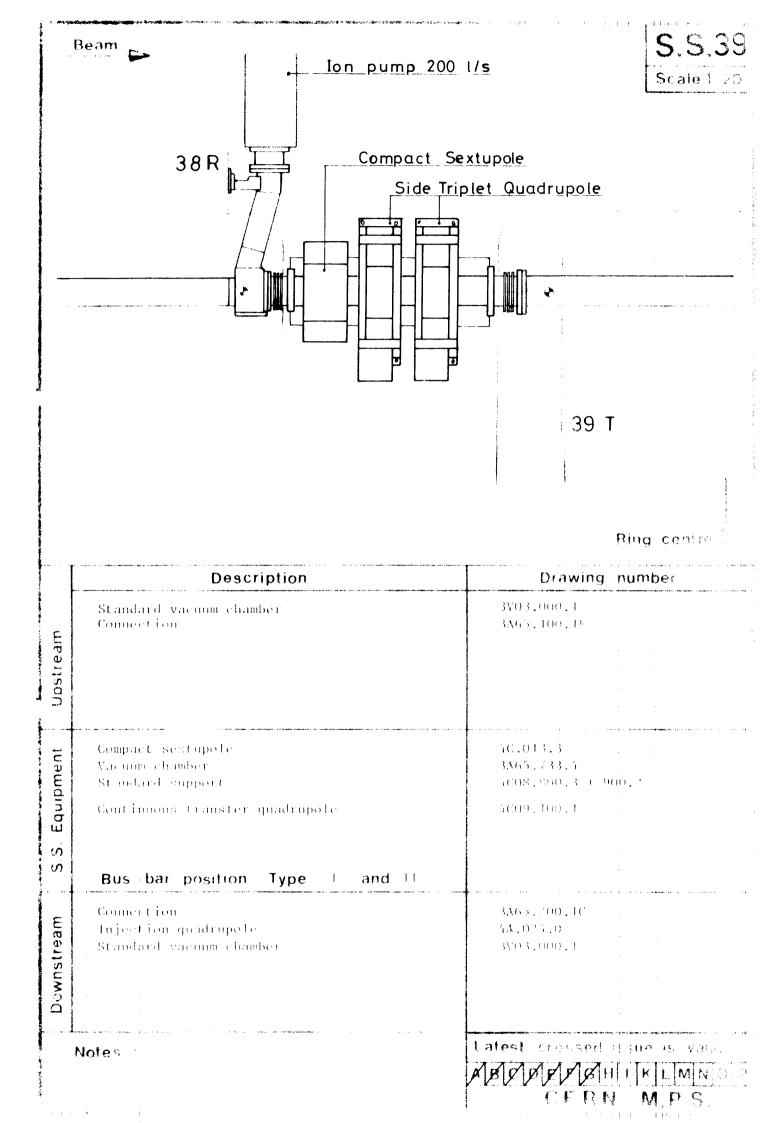
		Description	Drawing	number
		Large vacuum chamber	3707.000.0	· · · · ·
ε		TV screen	5A21.000.0	
Upstream		Connection	3A65.175.2	· · · · · · · · · · · · · · · · · · ·
Jpst				
t		Vertical dipole	4A14.005.0	
Equipment		Tuning quadrupole	4C06.000.0B	
ndiu		Vacuum chamber	HA65.756.4	.
Equ		Standard support	4C08.800.3 +	900.2
S.				
S	Bus	-bar position Type in and m		
		Connection	3A65.200.1C	
am		Skew quadrupole + vertical dipole Standard vacuum chamber	44.025.4	· · · ·
stre		Standara vacuum chamber	3703.000.1	i an internet
Downstream				· · · ·
Ď				
	Notes		Latest crossed	issue is valid :
			ABCBEFGI	HIKLMNOP
			CERI	M.P.S.

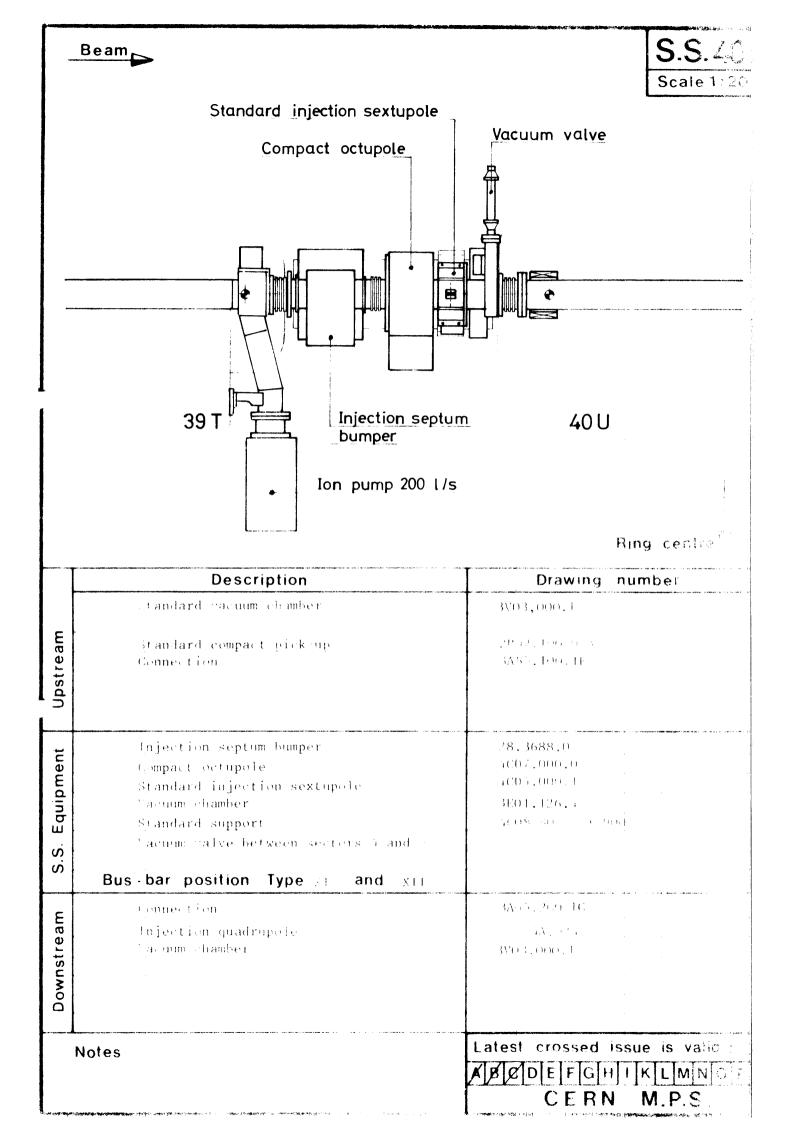


-	Beam	S.S. 36 Scale 1:20
35		
	New RF cavity Ion. pump 200 1/s	Ring centre
	Description	Drawing number
Upsti eam	Standard vacuum chamber Prek-up beam control Connection	3V03.000.1 2P02.100.0 A * 3A65.177.3
S.S. Equipment	New RF cavity Bus-bar position Type VII and VIII	2010.000.0
Downstream	Connection Injection quadrupole Standard vacuum chamber	3A65.200 1C 4A.024.0 3V03.000.1
	Notes	Latest crossed issue is valid : CDEFGHIKLMNGP CERN M.P.S.

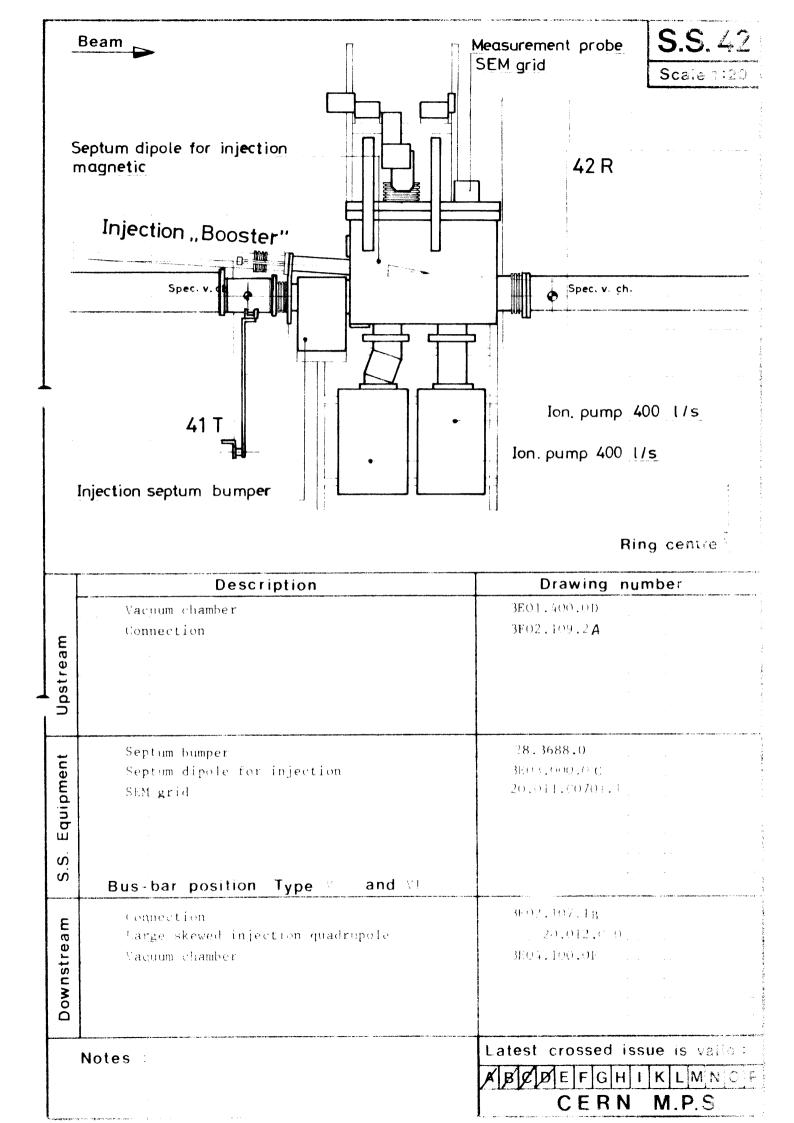


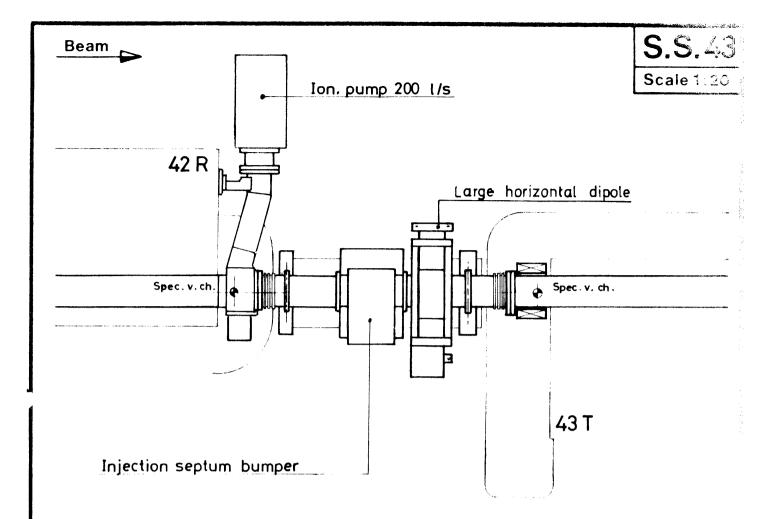
	Beam -		S.S .38 Scale 1:20
ne me ante all'Antonio de la contra de la contra contra de la contra de la contra de la contra de la contra de La contra de la contr		38 (2
	37 T	tandard support	Ring centre √
	Description	T	
			number
	Standard vacuum chamber Compact pick up phase	Drawing 3703.000.1 2202.100.03	
Upstream	Standard vacuum chamber	3703.000.1	n an under generale de service de service de service de la support de la service de service de la service de la
 	Standard vacuum chamber Compact pick up phase Connection	3¥03.000.1 2₽02.100.0A 3A65.100.10 3A65.733.4	
	Standard vacuum chamber Compact pick up phase Connection	3703.000.1 2902.100.0A 3A65.100.19	
S.S. Equipment Upstream	Standard vacuum chamber Compact pick up phase Connection Vacuum chamber Standard support	3¥03.000.1 2₽02.100.0A 3A65.100.10 3A65.733.4	
S.S. Equipment	Standard vacuum chamber Compact pick up phase Connection Vacuum chamber Standard support Bus-bar position Type v and vi Connection	3¥03.000.1 2P02.100.0A 3A65.100.14 3A65.733.4 4C08.800.3 +	
S.S. Equipment	Standard vacuum chamber Compact pick up phase Connection Vacuum chamber Standard support Bus-bar position Type v and vi	3¥03.000.1 2₽02.100.0A 3Å65.100.1 3Å65.733.4 4C03.800.3 +	
.S. Equipment	Standard vacuum chamber Compact pick up phase Connection Vacuum chamber Standard support Bus-bar position Type v and vi Connection Stev quadropole + vertical dipole	3V03.000.1 2P02.100.0A 3A65.100.13 3A65.733.4 4C08.800.3 + 3A65.200.1C 4A.025.5 3V03.000.1	
S.S. Equipment	Standard vacuum chamber Compact pick up phase Connection Vacuum chamber Standard support Bus-bar position Type V and VI Connection Stev quadrupole + vertical dipole Standard vacuum chamber	3V03.000.1 2P02.100.0A 3A65.100.14 3A65.733.4 4C03.800.3 + 3A65.200.1C 4A.025.3 3V03.000.1	





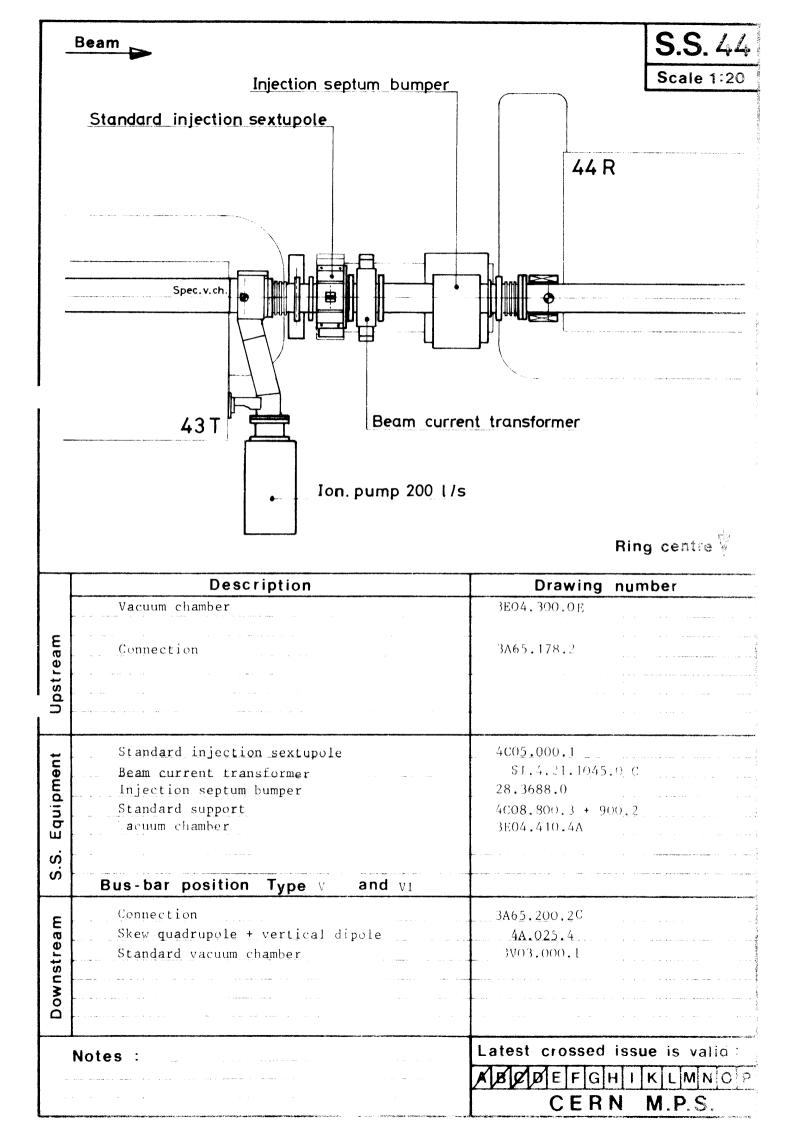
Ī	Beam Diection "Booster"	Vacuum valve SI
		Spe.v.ch.
40	U I I I I I I I I I I I I I I I I I I I	triplet
	Description	Drawing number
Upstream	Standard vacuum chamber Connection	3¥03,000,1 3A65,100.1F
Ups		
 	Quadropole triplet	
nent	Vacuum chambei Tank h vide	4009.100.1 3V05.001.3 3V05.000.0 4C08.800.3 (900.2
Equipment	Standard support	4 €08. 800.3 € 900.2
S. Eq		
S.5	Bus - bar position Type NITT and XIV	
Downstream	Connection Enjection quadrupole large skowed Vacuum ebamber	3A65.225.3 20.012.00 3E01.400.0D
Dow		
	Notes	Latest crossed issue is valid : ABCBFFGHIKLMNOP CERN M.P.S.





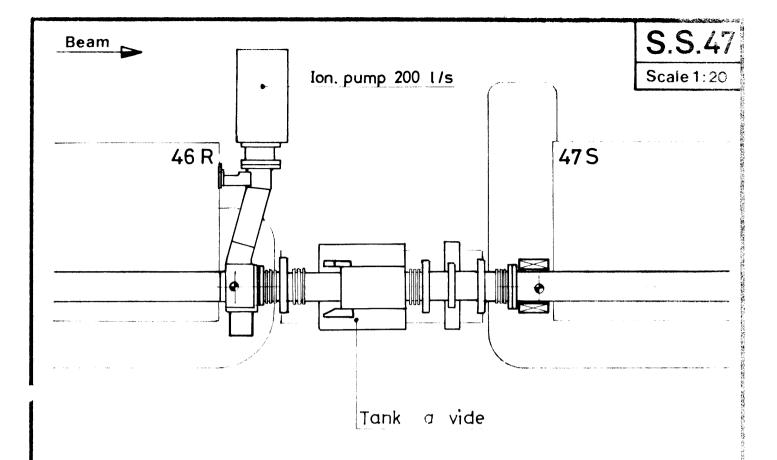
Ring centre 🦩

	Description	Drawing number
	Vacuum chamber	3E04.100.0F
am	Large compact pick-up	2P02.100.0 A
Upstream	Connection	3A65.130.1
а́л Л		
	Şeptum bumper	28.3688.0
Equipment	Vacuum chamber (inconel)	3EO4.236.3
nd	Standard support	4008.800.3 + 900.2
B	Large horizontal dipole	64.A41.1
S.S	Bus-bar position Type and II	
	Connection	3A65.230.1
am	Large skewed injection quadrupole	20.012.0 0
Downstream	Vacuum chamber	3E04.300.0E
su s		
Š		
	Notes :	Latest crossed issue is valid :
		KBCBEFGHIKLMNOP
		CERN M.P.S.



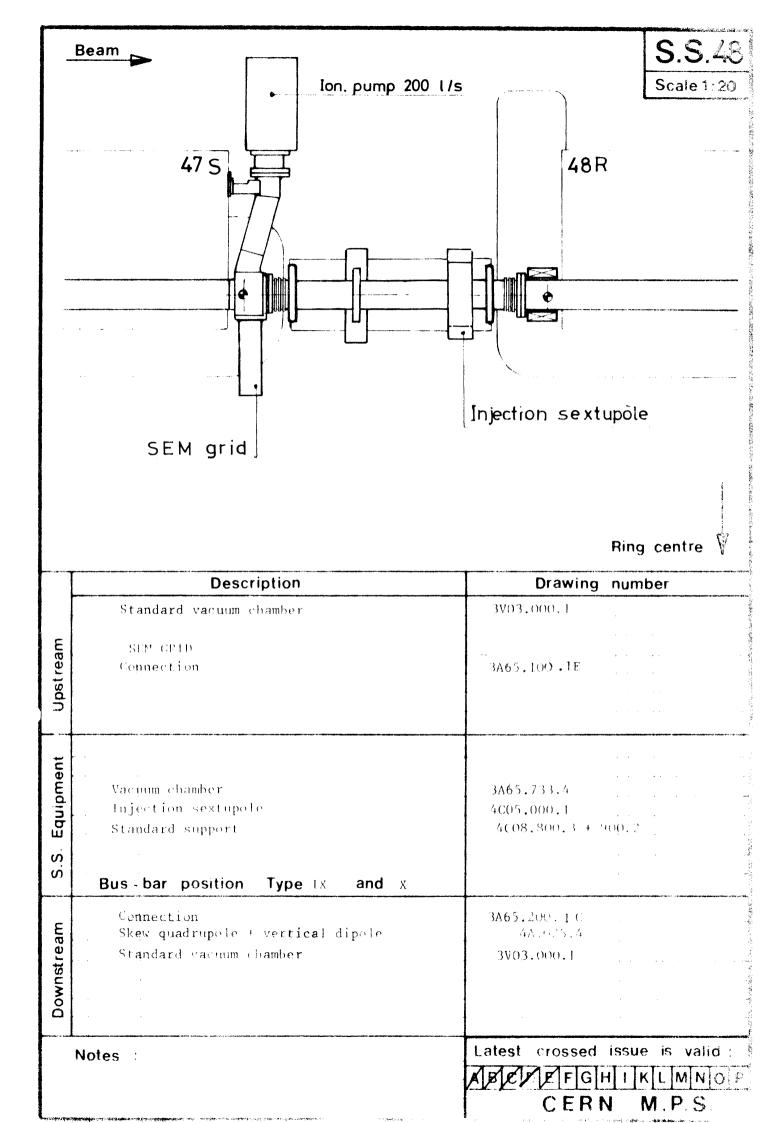
	Beam Turbor	nolecular - pump HP 900	S.S. 45
	44R 44R Fast injection kic	45 ker	T Ring centre
	Description	Drawing	number
	Standard vacuum chamber Standard compact pick~up	3V03.000.1 2P02.100.0A	
ап	Connection	3A65.100.1E	
Upstream	• • • • • • • • • • • • •		
an N	· · · · · · · · · · · · · · · · · · ·		
 	Part inightion bishor	2A59.000.0B	
ent	Fast injection kicker	27() 9.0001.015	
Equipment			
Equ			
Ś		and the second second	· · · · · · · · · · · ·
Ś	Bus-bar position Type 1 and 11		
_	Connection	3A65.200.1C	
rean	Injegtion quadrupole Standard vacuum chamber	4A,024.0 3V03.000.1	
Downstream			
Dow			
 		Latest crossed	iscus is voted -
	Notes		
L		A B C D E F G	HIKLMNOP

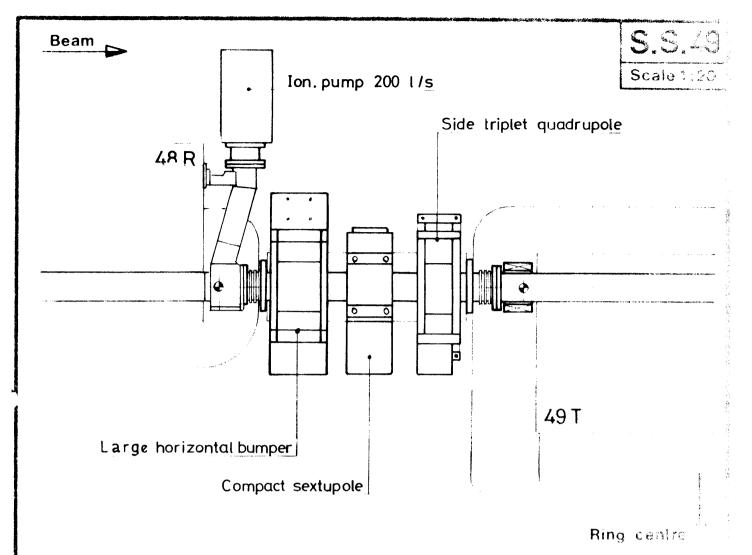
	Beam	S.S. 46 Scale 1:20
45	New RF cavity Ion. pump 200 L/s	Bing centre
	Description	Drawing number
	Standard vacuum chamber	3('03,000,1
Upstream	Connection	3A65,177,3
S.S. Equipment	New RE-cavity Bus - bar position Type VII and VIII	2010,000,0
Downstream	Connection Injection quadrupole Standard vacuum chambor	3465,200 - 1 C
	Notes :	Latest crossed issue is valid ABDEFGHIKLMNOP CERN M.P.S.



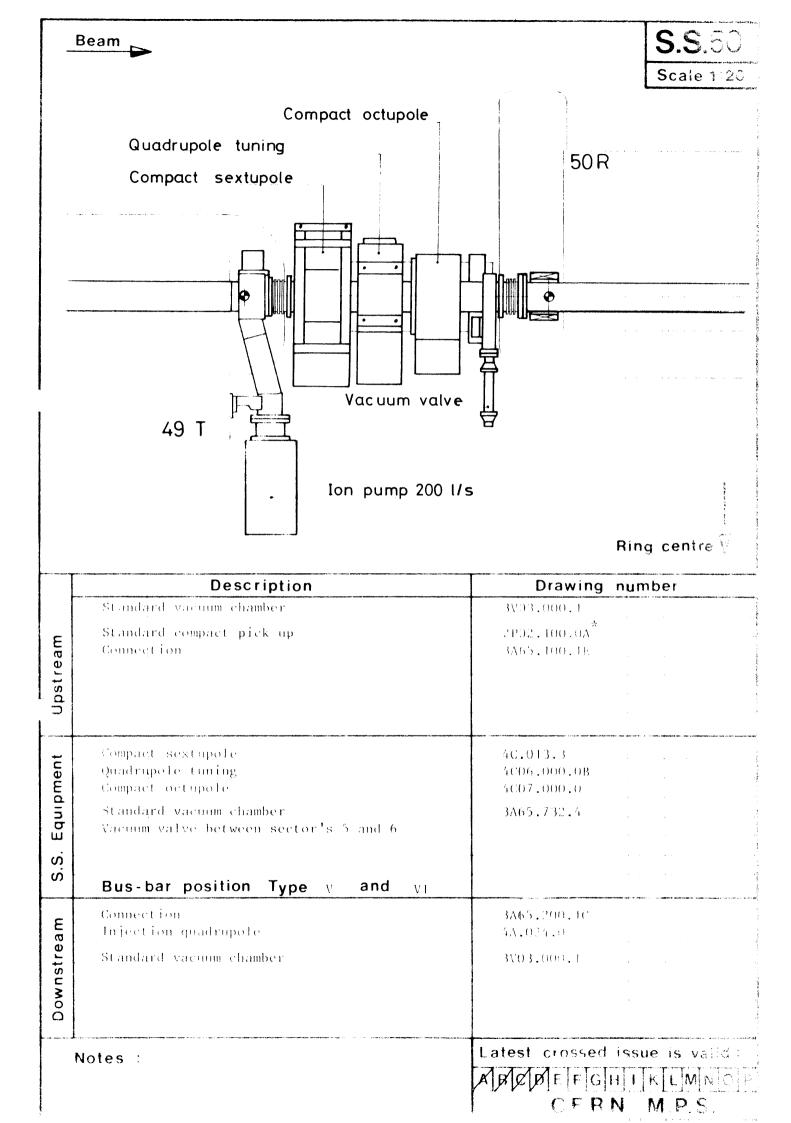
Ring centre 🕅

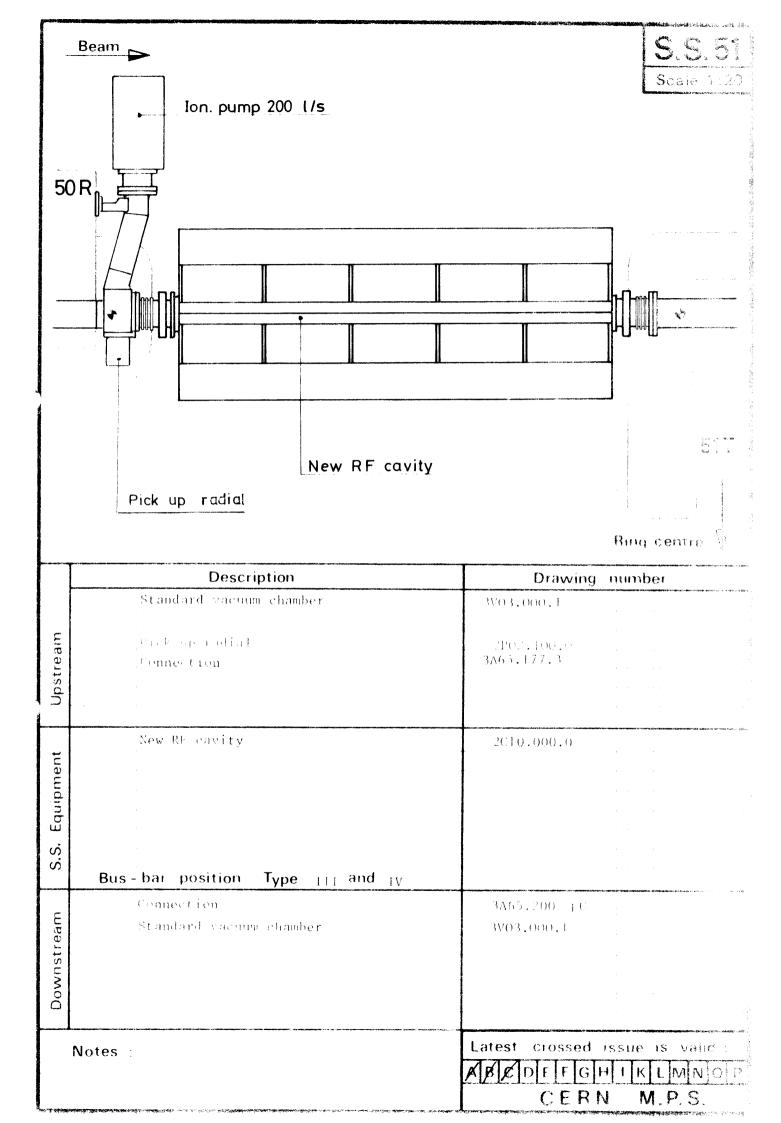
	Description	Drawing number
	Standard vacuum chamber	3V03.000.1
Upstream	Standard compact pick-up Connection	2P02.100.0 A * 3A65.100.1E
'n		
S.S. Equipment	Vacuum tank Vacuum chamber Standard support Bus-bar position Type FX and X	3VC5.000.0 3V05.003.3 4C08.800.3 + 900.2
Downstream	Connection Skew quadrupole + vertical dipole Standard vacuum chamber	3A65.200.1C 4A.025.4 3V03.000.1
	Notes	Latest crossed issue is valid : ABCBEFGHIKLMNOP CERN M.P.S.

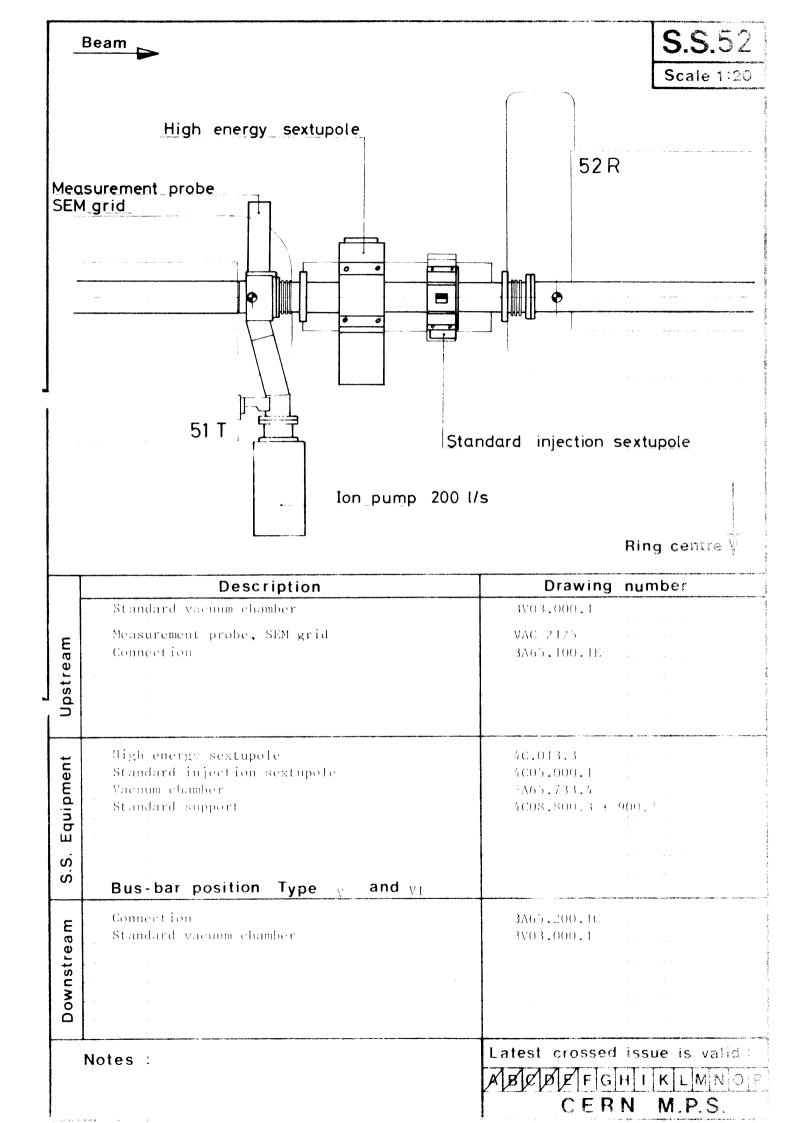


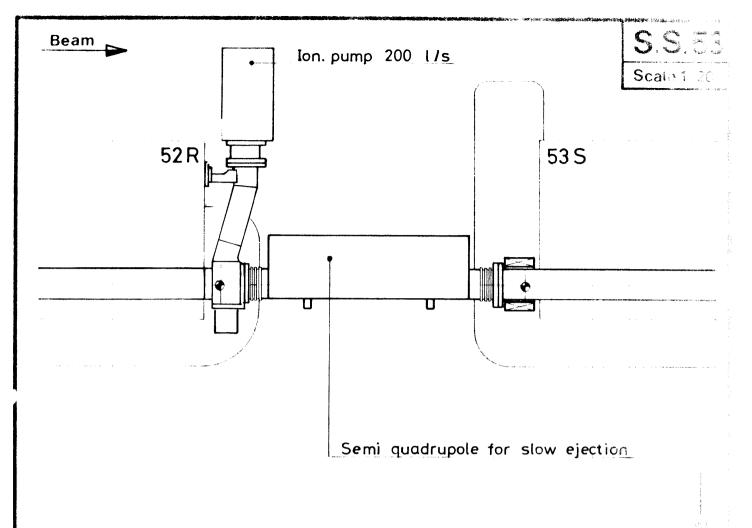


	Description	Drawing number
	Standard vacuum chamler	3703.000.1
Upstream	Connection 	
S.S. Equipment	large horizontal bumper Compact sextupole Side triplet quadrupole Side triplet quadrupole Standard vacuum chamber Standard support Standard support Bus - bar position Type + and + 1	64.A41.4 AC013.3 4C09,100.2 BA65.733.4 AC08.2000.2000 AC08.2000 AC08.2000 AC08.2000 AC08.2000 AC08.2000 AC08.2000 AC09.1000 AC09.1000 AC09.1000 AC09.100
Downstream	Connection Injection quadrupole Standard facuum chamber	3A65,200,10
	Notes	Latest crossed issue is valid ABEBEF GHIKLMN CERN M.P.S.



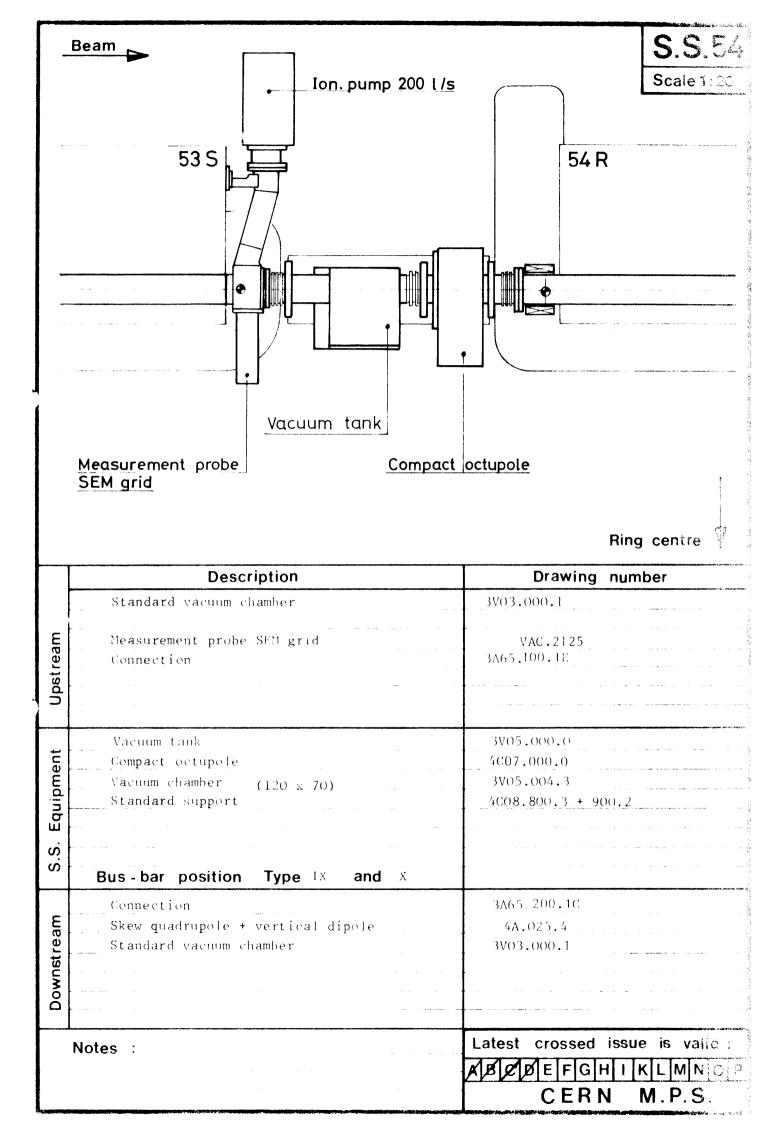


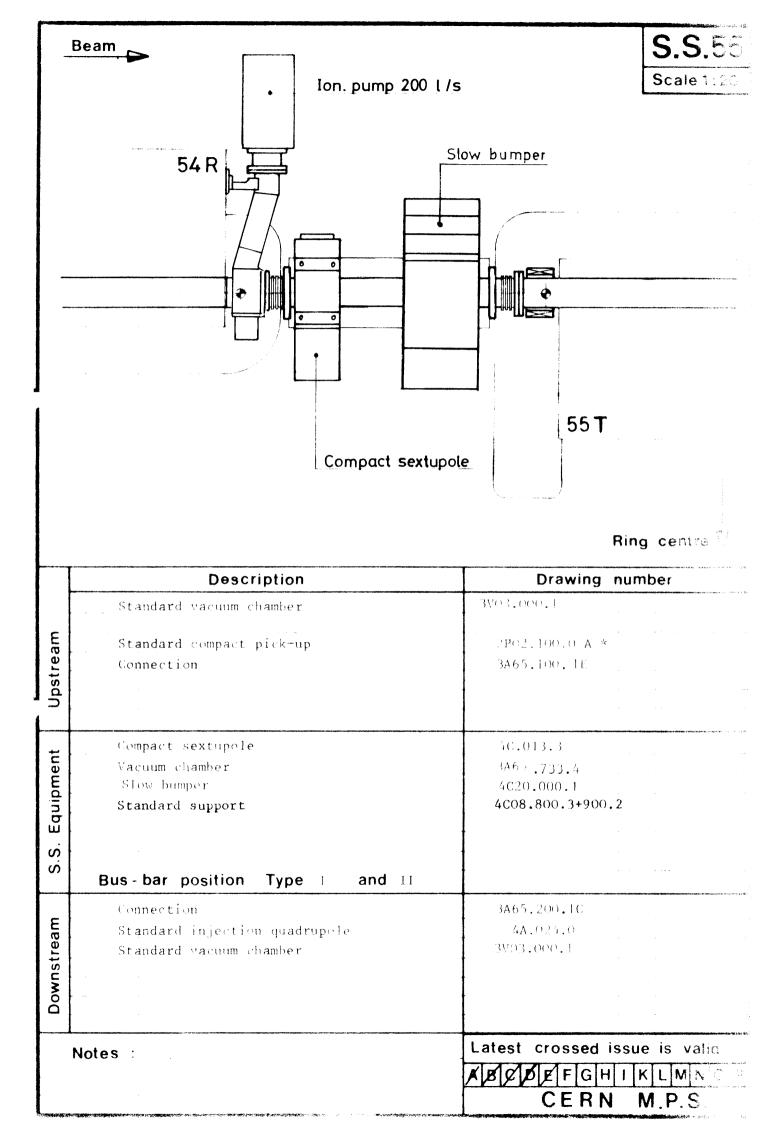




Ring centre

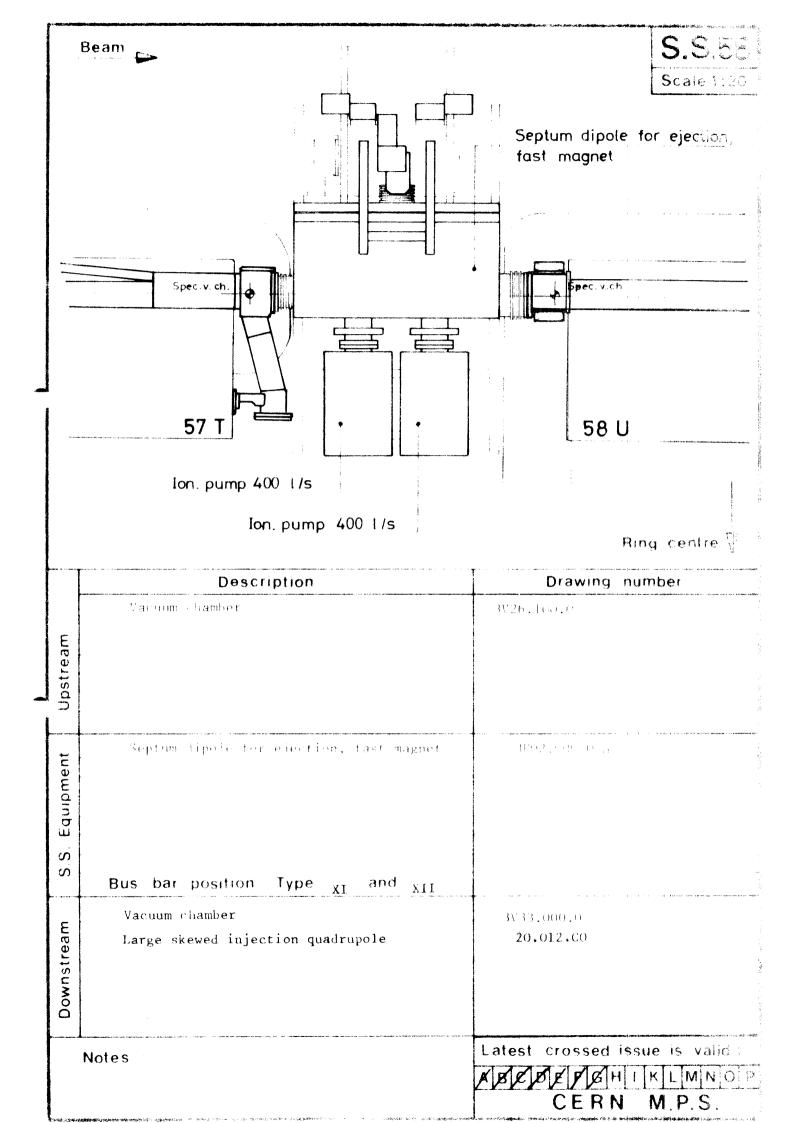
	Description	Drawing	number
	Standard vacuum chamber	31/03.000.1	
Upstream	Standard compact pick-up Connection	2P02.100.0 A * 3A65.100.2 D	
Ğ,			· · · · · · · · ·
t t	Semi quadrupole (square)	POZZO (EP	Dįvision)
Equipment		34.120.3	
			· · · · · · ·
S.S	Bus-bar position Type IX and X		
Downstream	Connection Skew quadrupole + vertical dipole Standard vacuum chamber	3A65.200.2 B 4A.025.4 3V03.000.1	· · · · · · · · · · · · · · · · · · ·
Ĝ			
	Notes :	Latest crossed	issue is valid : HIKLM NOTE
		CERI	M.P.S.



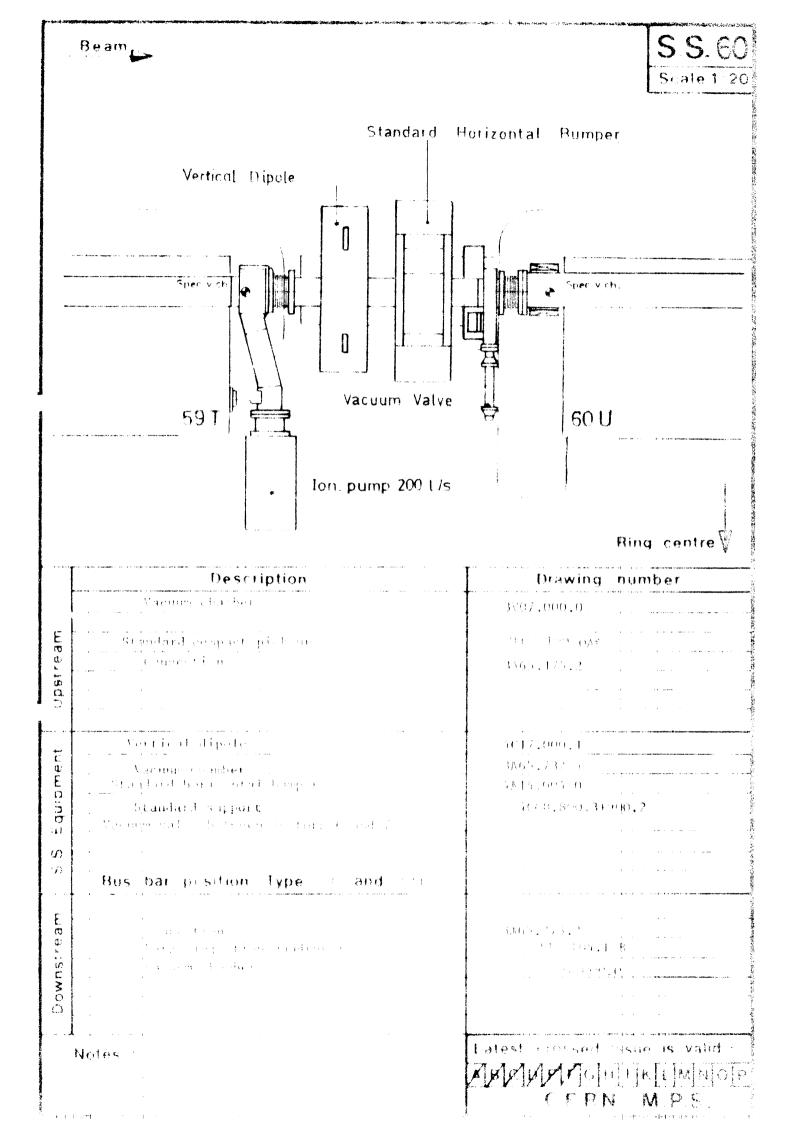


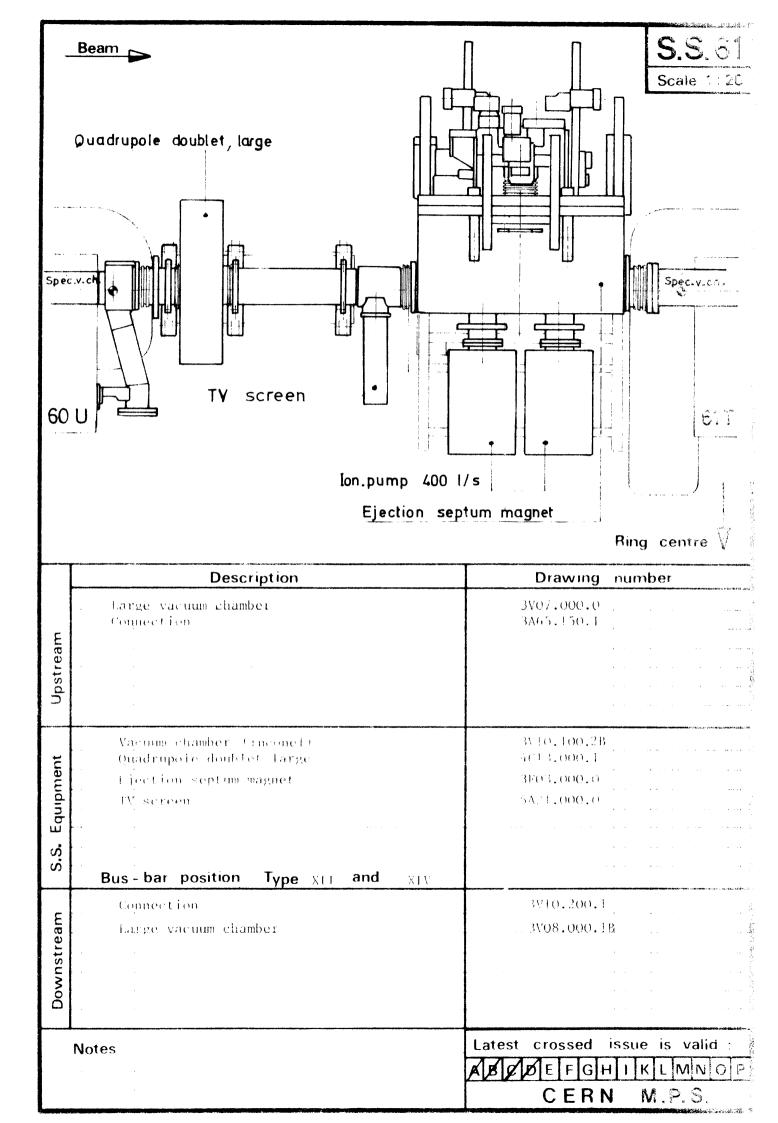
-	Beam		S.S.5 6 Scale 1.20
55	New RF cavity Ion. pump 200 1/s		Spesswelt 56 R
	Description		Ring centre }
	Standard vacuum chamber	3Y03.000.1	
Upstream	Connection	3Абб.177.3	
S.S. Equipment	New RF cavity Bus - bar position Type VII and VIII	2010.000.0	
Downstream	Connection Injection quadrupole Vacuum chamber	3A65.200 + (4A,024.0 3V07.000.0	
	Notes	atest crossed is	sue is value IKLMN 200 M.P.S.

	Beam	n an fair ann an Anna ann ann an Anna Anna Anna	S.S.57 Scale 1:20
	Spec.v.ch.	le Spec.v	<u>د</u>
loi	56 R r F Septum bumper Jump quadru		Ring centre
	Description	Drawing	number
Upstream	Vacuum chamber Comps ' lon 	. 307.000.0. 3065.150.5	
	Septum lenger	\$C20.000.1	na an a
nen	Large compact pick up tump quada quele	1993-1997-1 40-14.000-1	· · · · · · · · · · · · · · · · · · ·
Equipment	generation (Chapter) Frank, Clatheo (Dec)	33352 [140]	· · · · · · · · · ·
S.S. Eq	Special support Other qualipoole Vacana cheeter Bus-bar position Type of and Mi	<u>ч(2)с,000,2</u> 8035,20,000,20 3Абрало[+2].	137161000.0
me	t specifican.	3A65.250.1A	·
Downstream	Carrient stranber	Wielloe.c	· · · · · · · · · · · · · · · · · · ·
SUM	Injection quadrupole large skew	2(),()) ^{1,2} ,()) 	· · · · · · · · · · · · · · · · · · · ·
å			· · · · · · · · · · · · · · · · · · ·
	Notes :	Latest crossed	IIKLMNOP



	Beam	in an	S.S. 59 Scale 1:20
	Spec.v.ch.	Spec.v. 59 T	- ch.
	Turbo THP		Ring centre
	Description	Drawing	number
Upstream	Vacuum chamber Connection	3533,000.0 (463,150,1	
S.S. Equipment	Vacuum chamber Bus-bar position Type X1 and X11	3A71.201.1C	
Downstream	Connection Large injection quadrupole Vacuum chamber	3A65.250.1 118.104.1 B 3Y07.000.0	
	Notes :	Latest crossed	IIKLMNOP

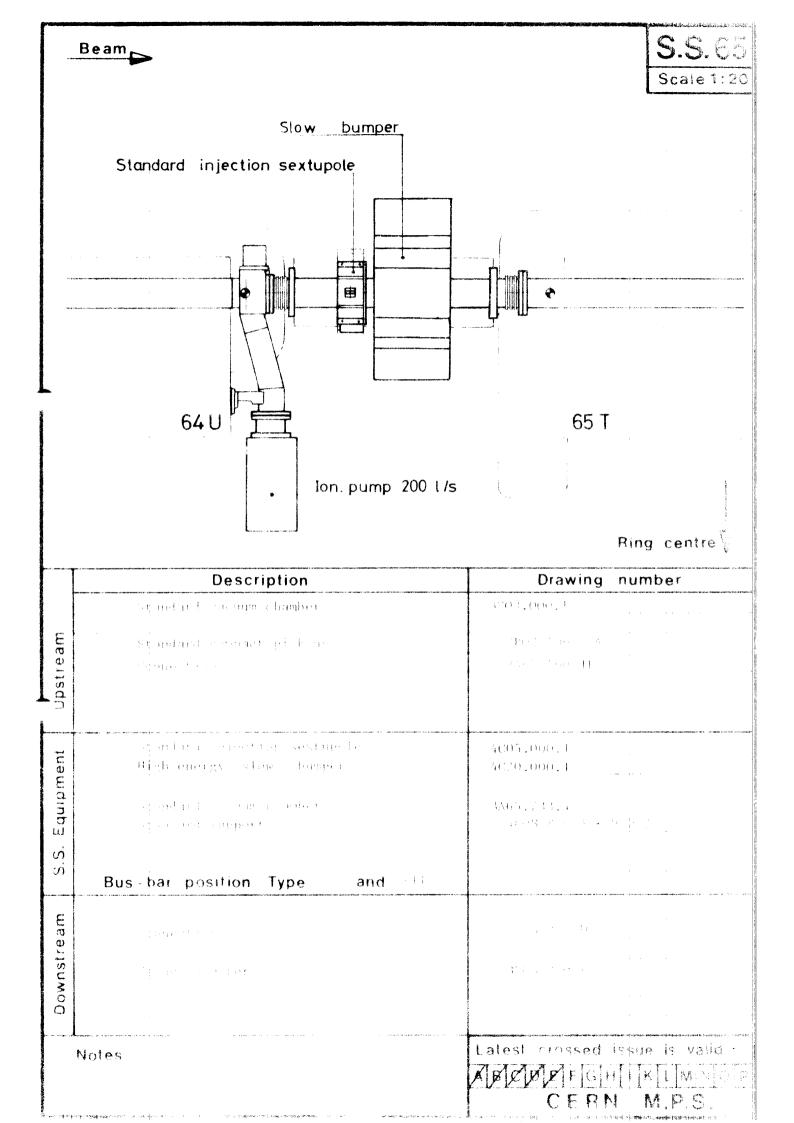


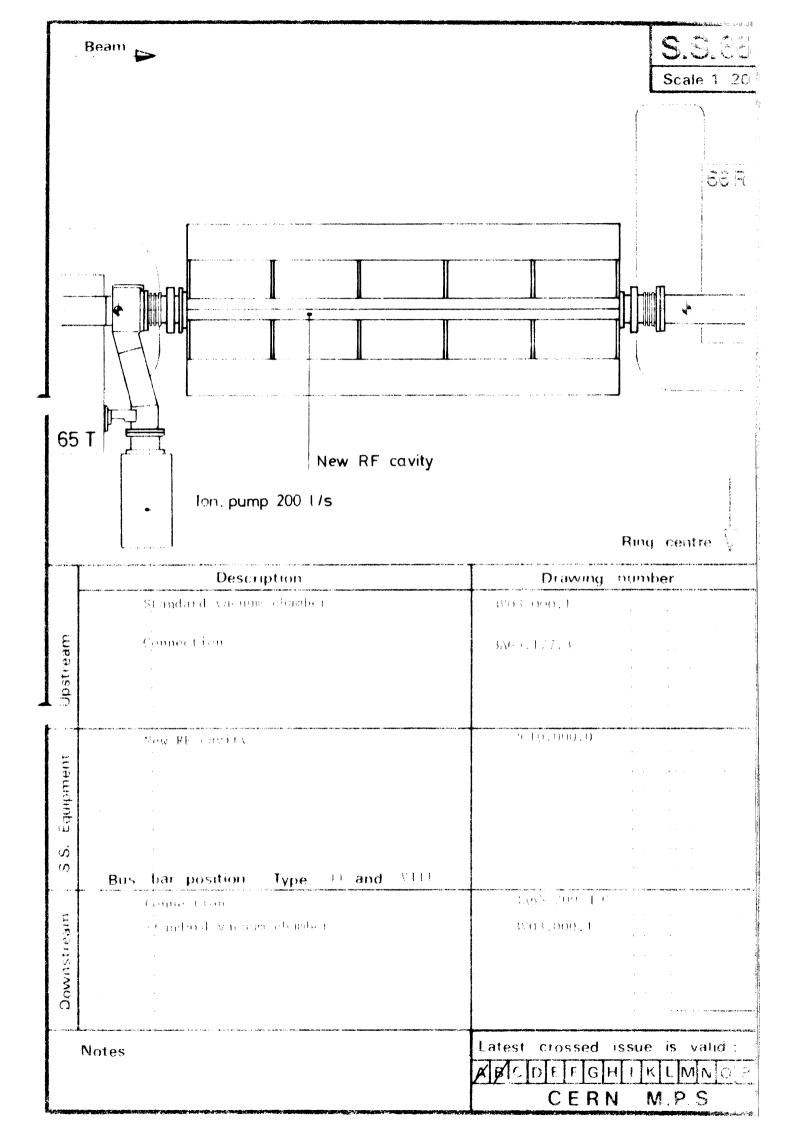


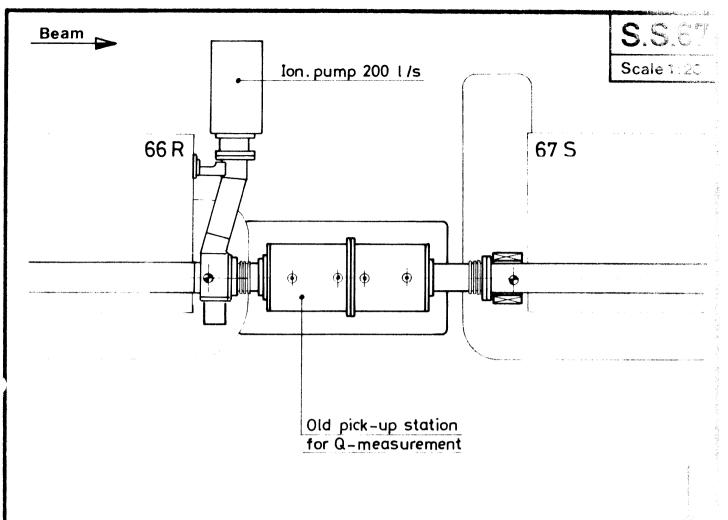
-	Beam	1	S.S. 82 Scale 1:20
	TV screen	Ejection septum	magn er
	Spec.v.ch.	Spec.v.eh	Shims
		 62 U	
	Ion pump 400 l/s		
		Rin	g ceana
	Description	Drawing nur	nber
	large vacuum hamber	3V08.000.18	
an	IV percen	5A21,000.0	· · · ·
Upstream			
l ġ			
			en on an all an
Equipment	Fiection septum magnet	3F04.000.0	
luip			
S.S.	Rue has position Tune and		· · ·
	Bus-bar position Type $_{\rm X1}$ and $_{\rm X11}$		с инадомитик айтимана алта склостка № 10
Downstream	Large vacuum chamber	37.00.00.07	
nstr		· · ·	
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			na na mandara na mandra na mangana na mangana na manaka na mangana na mangana na mangana na mangana na mangana Na mangana na
	Notes :	Latest crossed issu	

-	Beam		S.S. 63
	Large Pick - up Shims Spec v ch Ejected Beam Lire	€3 T	Scale 1:20 62 e9
	Ion pump 200 I/s	ptum Bumper	Ring centre
	Description	Drawing	numbe
Upstream	Vacuum chamber	3¥09.000.0A 4C18.519.2	
S.S. Equipment	Vacuum chamber Lange pick up Septam bumper Bus-bar position Type x1 and x11	3A65.735.0 2P02.100.2 4C20.000.2	
Downstream	Bus-bar position type Ar and Art Connection Vacuulation Vacuulation Vacuulation Vacuulation Vacuulation Vacuulation Vacuulation Vacuulation Vacuulation Vacuulation Vacuulation Notes Vacuulation Vacuulation Vacuulation	4018,518.3 3A17.000.0E	issue is valid
I		ABEBETGI	HIKLMNOP

-	Beam		62	S.S.6 Scale 1:2 e9
		Spec.v.ch 63T 63T Compact sextupole	64 L	
	lon pu	mp 200 l/s		Ring centre
-		Description	Drawing	number
Upstream		Large vacuum chamber Connection	3A17.000.0 F 3A65.100.1E	· · · · · · · · · · · · · · · · · · ·
S.S. Equipment		Compact sextupole Vacuum chamber Standard support	40.013.3 3A65.733.4 4C08.800.3 +	
Downstream		-bar position Type X1 and X11 Connection Standard vacuum chamber Injection quadrupole	3A65.200.10 3V03.000.1 1A025.4	
I	Notes		Latest crossed	HIKLMNO







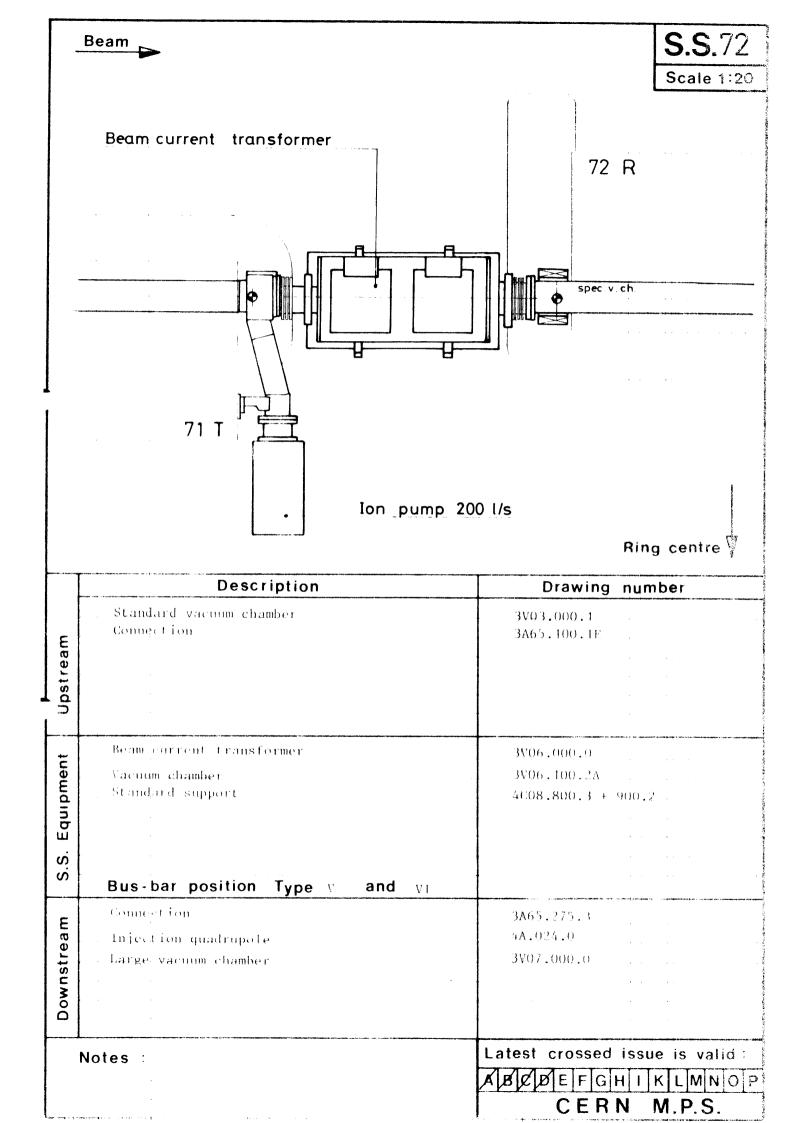
	Description	Drawing	number
	Standard vacuum chamber	3V03,000.1	
Upstream	Standard compact pick-up Connection	2P02.100.0 A * 3A65.100.20	
Upst			· · · · ·
nent	Old pick-up station	3A69.000.0	
Equipment			· · · · · · · · · · · · · · · · · · ·
S.S.	Bus-bar position Type IX and X		· · · · · · · · ·
Downstream	Connection Injection quadrupole Standard vacuum chamber	3A65.200.2B 4A.024.0 3V@3.000.1	
Down			
	Notes :	Latest crossed	HIKLMNOP

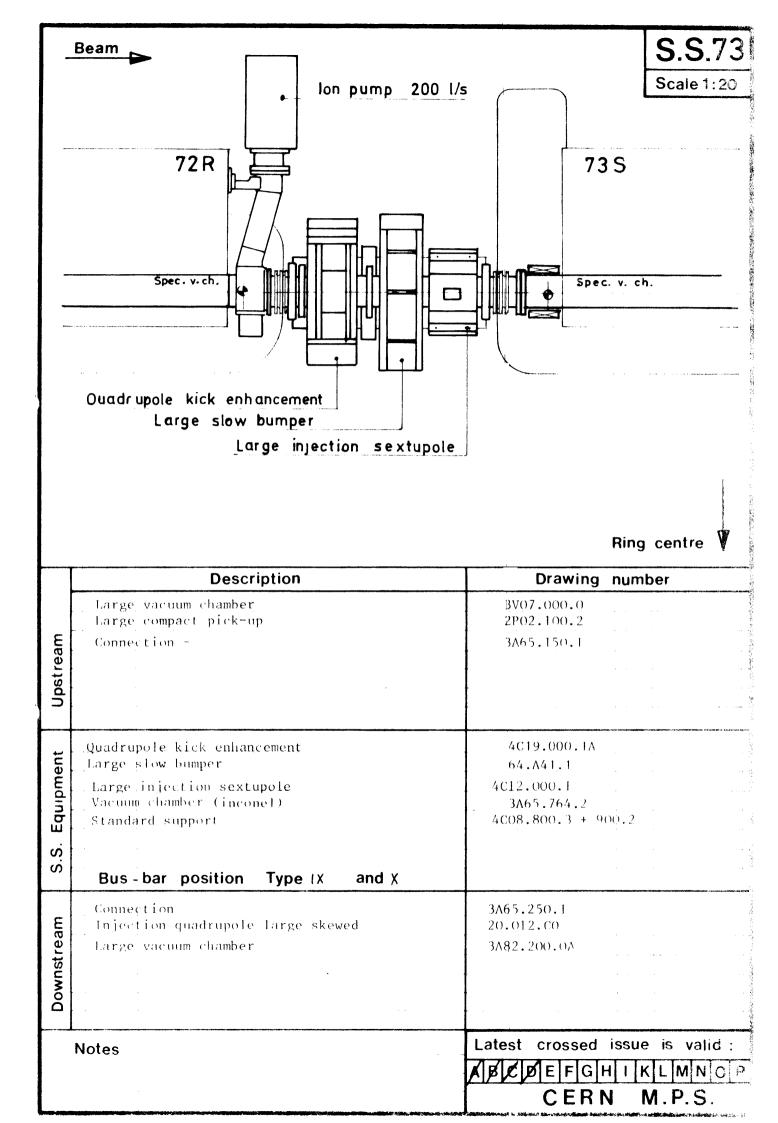
	Beam	S.S.63
		Scale 1:20
	Ion Pump 200	
	Compact Sex	
		dard Horizontal Bumper
		cal Dipole
-		
-		
l		
l		68 U
		Ring centre V
	Description	
	Description	Drawing number
	Standard vacuum chamber	3003.000.1
am		
stream	Standard vacuum chamber	3003.000.1
Upstream	Standard vacuum chamber Pick-up phase control	3V03.000.1 2P01.100.0A
Upstream	Standard vacuum chamber Pick-up phase control Connection	3V03.000.1 2P01.100.0A 3A65.100.11
	Standard vacuum chamber Pick-up phase control Connection Compact sextupole	3V03.000.1 2P01.100.0A 3A65.100.1) 4C.013.3
	Standard vacuum chamber Pick-up phase control Connection Compact sextupole Standard horizontal bumper Vacuum chamber	3V03.000.1 2P01.100.0A 3A65.100.11 4C.013.3 4A14.004.0 3A65.733.4
	Standard vacuum chamber Pick-up phase control Connection Compact sextupole Standard horizontal bumper Vacuum chamber Standard support	3V03.000.1 2P01.100.0A 3A65.100.11 4C.013.3 4A14.004.0 3A65.733.4 4C08.800.3+900.2
Equipment	Standard vacuum chamber Pick-up phase control Connection Compact sextupole Standard horizontal bumper Vacuum chamber	3V03.000.1 2P01.100.0A 3A65.100.11 4C.013.3 4A14.004.0 3A65.733.4
	Standard vacuum chamber Pick-up phase control Connection Compact sextupole Standard horizontal bumper Vacuum chamber Standard support Vertical dipole	3V03.000.1 2P01.100.0A 3A65.100.11 4C.013.3 4A14.004.0 3A65.733.4 4C08.800.3+900.2
S. Equipment	Standard vacuum chamber Pick-up phase control Connection Compact sextupole Standard horizontal bumper Vacuum chamber Standard support	3V03.000.1 2P01.100.0A 3A65.100.11 4C.013.3 4A14.004.0 3A65.733.4 4C08.800.3+900.2
S.S. Equipment	Standard vacuum chamber Pick-up phase control Connection Compact sextupole Standard horizontal bumper Vacuum chamber Standard support Vertical dipole Bus-bar position Type I and II Connection	3V03.000.1 2P01.100.0A 3A65.100.11 4C.013.3 4A14.004.0 3A65.733.4 4C08.800.3+900.2 4A14.005.0 3A65.200.1C
S.S. Equipment	Standard vacuum chamber Pick-up phase control Connection Compact sextupole Standard horizontal bumper Vacuum chamber Standard support Vertical dipole Bus-bar position Type I and II Connection Injection quadrupole	3V03.000.1 2P01.100.0A 3A65.100.1) 4C.013.3 4A14.004.0 3A65.733.4 4C08.800.3+900.2 4A14.005.0
S.S. Equipment	Standard vacuum chamber Pick-up phase control Connection Compact sextupole Standard horizontal bumper Vacuum chamber Standard support Vertical dipole Bus-bar position Type I and II Connection	3V03.000.1 2P01.100.0A 3A65.100.11 4C.013.3 4A14.004.0 3A65.733.4 4C08.800.3+900.2 4A14.005.0 3A65.200.1C
S. Equipment	Standard vacuum chamber Pick-up phase control Connection Compact sextupole Standard horizontal bumper Vacuum chamber Standard support Vertical dipole Bus-bar position Type I and II Connection Injection quadrupole	3V03.000.1 2P01.100.0A 3A65.100.11 4C.013.3 4A14.004.0 3A65.733.4 4C08.800.3+900.2 4A14.005.0 3A65.200.1C 4A.024.0
S.S. Equipment	Standard vacuum chamber Pick-up phase control Connection Compact sextupole Standard horizontal bumper Vacuum chamber Standard support Vertical dipole Bus-bar position Type I and II Connection Injection quadrupole Standard vacuum chamber	3V03.000.1 2P01.100.0A 3A65.100.1) 4C.013.3 4A14.004.0 3A65.733.4 4C08.800.3+900.2 4A14.005.0 3A65.200.1C 4A.024.0 3V03.000.1
S.S. Equipment	Standard vacuum chamber Pick-up phase control Connection Compact sextupole Standard horizontal bumper Vacuum chamber Standard support Vertical dipole Bus-bar position Type I and II Connection Injection quadrupole	3V03.000.1 $2P01.100.0A$ $3A65.100.11$ $4C.013.3$ $4A14.004.0$ $3A65.733.4$ $4C08.800.3+900.2$ $4A14.005.0$ $3A65.200.1C$ $4A.024.0$ $3V03.000.1$ Latest crossed issue is vanc :
S.S. Equipment	Standard vacuum chamber Pick-up phase control Connection Compact sextupole Standard horizontal bumper Vacuum chamber Standard support Vertical dipole Bus-bar position Type I and II Connection Injection quadrupole Standard vacuum chamber	3V03.000.1 2P01.100.0A 3A65.100.1) 4C.013.3 4A14.004.0 3A65.733.4 4C08.800.3+900.2 4A14.005.0 3A65.200.1C 4A.024.0 3V03.000.1

-	Beam	S.S. 69 Scale 1:20
	Compact s	sextupole
	Standard injection sextupole	Standard doublet quadrupole
	Description	Ring centre Drawing number
Upstream	Standard vacuum chamber Connection	3V03.000.1 3A65.100.1E
S.S. Equipment	Standard injection sextupole Compact sextupole Standard doublet quadrupole Standard vacuum chamber (inconel) Standard support Bus-bar position Type X1 and X11	4005.000.1 4A14.004.0 4C10.000.0 3A65.765.4 4C08.800.3 + 900.2
Downstream	Connection Skew quadrapole + vertical dipole Standard vacuum chamber	3A65.200.1C 4A.025 4 3V03.000.1
	Notes :	Latest crossed issue is valid : ABCDEFGHIKLM CERN M.P.S .

- 1	Beam -	S.5	5. 70
		Scal	e 1:20
	<u>Compact</u> octupole		
	Standard horizontal bumper	70 R Vacuum valve Ring cent	tre V
	Description	Drawing number	
Upstream	Standard vacuum chamber Standard compact pick up Connection	ЗV03.000.1 2P02.100.0 д* Зд65.100.1E	· · · · · · · · · · · · · · · · · · ·
S.S. Equipment Upstream	Standard vacuum chamber Standard compact pick up Connection Standard horizontal bumper Compact octupole Vacuum chamber (120 x 70) Standard support Vacuum valve between sectors 7 and 8	3V03.000.1 2P02.100.0 A* 3A65.100.1E	
.S. Equipment	Standard vacuum chamber Standard compact pick up Connection Standard horizontal bumper Compact octupole Vacuum chamber (120 x 70) Standard support Vacuum valve between sectors 7 and 8	3V03.000.1 2P02.100.0 A* 3A65.100.1E 4A14.005.0 4C07.000.0 3A65.745.4 4C08.800.3 + 9Q0.2	
Downstream S.S. Equipment	Standard vacuum chamber Standard compact pick up Connection Standard horizontal bumper Compact octupole Vacuum chamber (120 x 70) Standard support Vacuum valve between sectors 7 and 8 Bus-bar position Type V and V1 Connection Skew quadrupole + vertical dipole Vacuum chamber	3V03.000.1 2P02.100.0 A* 3A65.100.1E 4A14.005.0 4C07.000.0 3A65.745.4 4C08.800.3 + 9Q0.2 3A65.200.1C 4A.025.4 3V03.000.1	valid :

Γ	Beam >	S.S. 71
	70 R Fast kicker for ejection	Lon. pump 400 1/s Lon. pump 400 1/s THP 900
	rbomolecular pump THP 900 I/s Ion. pump 400 1/s Ion. pump	Ring centre
	Description	Drawing number
Instream	Standard vacuum chamber Connection	3V03.000.1 2A34.125.2 A
S S Fautoment	5	2A34.100.0 C
mentanno	Connection	2A34.126.2 4A.024.0 W03.000.1
	Notes :	Latest crossed issue is valid : A BCDEFGHIKLMNOP CERN M.P.S.



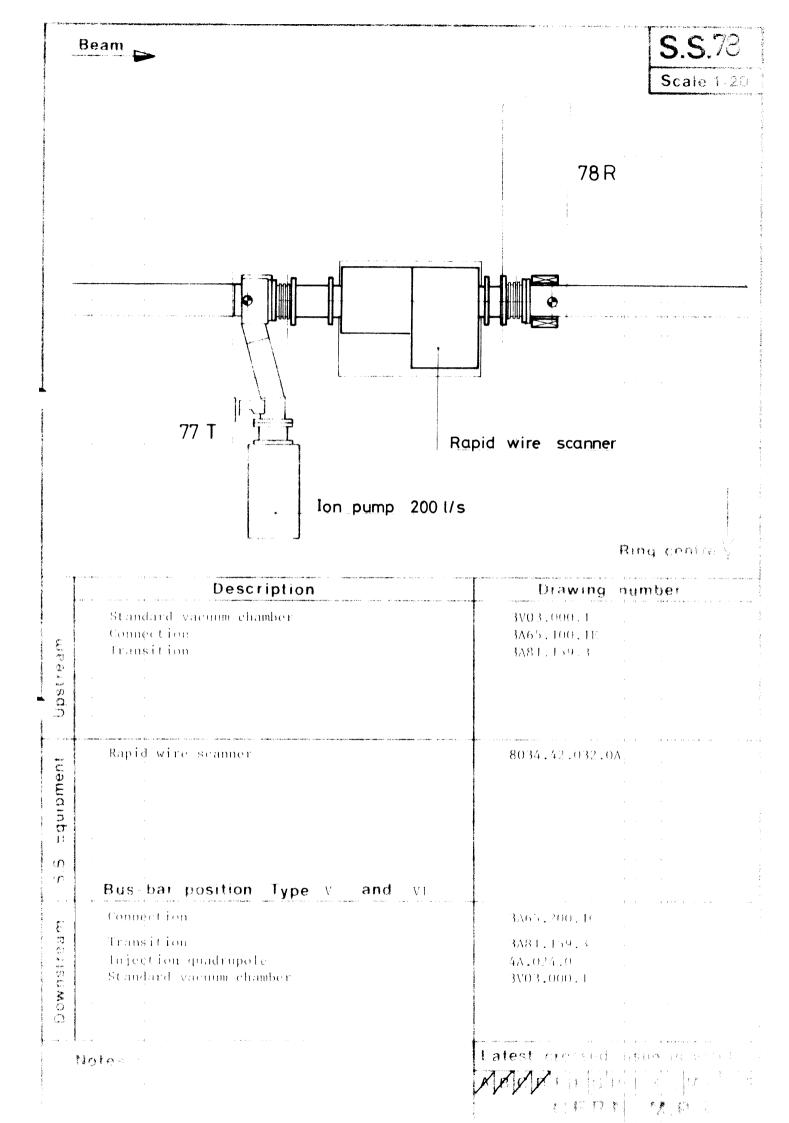


16	Beam 🅞		S.S. 74 Scale 1:20
	73 S		
	spec. v. ch.	spec.v.ch	
	lon pump 400 l/s		Ring centre V
	Description		number
Upstream	Vacuum chamber Connection	3A82.200.0A 3A65.150.1	
S.S. Equipment	Vacuum chamber Ton pump 400 1/s Bus-bar position Type 1 and 11		
Downstream	Connection Large skewed injection quadrupole Vacuum chamber	20.012.C0 3V13.000.0	
	Notes	Latest crossed in ABCDEFGH CERN	IKLMNOP

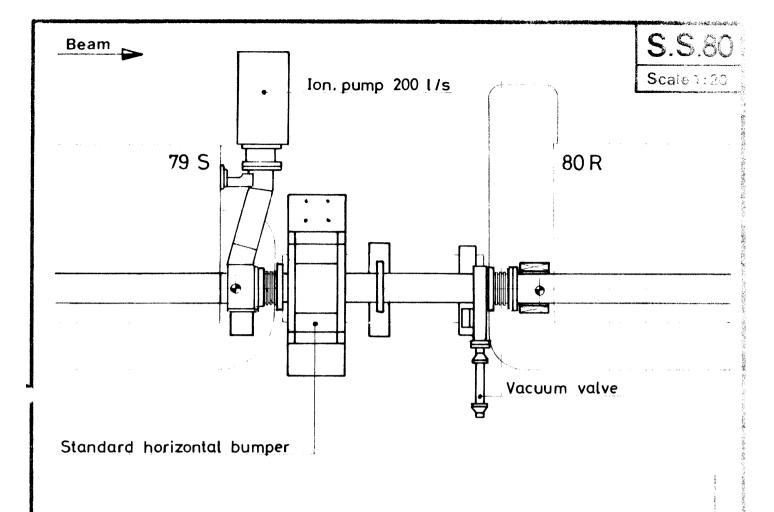
Beam	S.S.75 Scale 1:20
Spec. v.ch.	Turbomolecular-pump THP 900 Ring centre
Description	Drawing number
Vacuum chamber	3V13.000.0
Connection	3V14.203.2
Yamum chamber Uarge pick-up So Bus - bar position Type x1	3V14,202,2 (3V14,000,0) 2P02,100.2
Connection Vacuum chamber	3A65.250.1 3A30.000.08
Notes	Latest crossed issue is valid : XBC EFGHIKLMNOP CERN M.P.S .

	Beam	S.S. 76 Scale 1 20
^{5pec.}		
	Ion. pump 200 L/s	Bing centre
		Ring centre 🗸
	Description	Drawing number
	Vacuum chamber	3A3(), (((n), ())B
Upstream	Connection	3Λ65.177.3
b.S. Equipment	New RF cavity	2010,000,0
S	Bus bar position Type VII and VIII	
am	Connection.	$3\chi(\phi^{+}, \gamma^{+})(\phi^{+})$
Downstream	Standard injection quadrupole Standard vacuum chamber	4∧.0. ² 5.4 \$V03.000.1
	Notes	Latest crossed issue is valid : ABCBEFGHIKLMNOP CERN M.P.S.

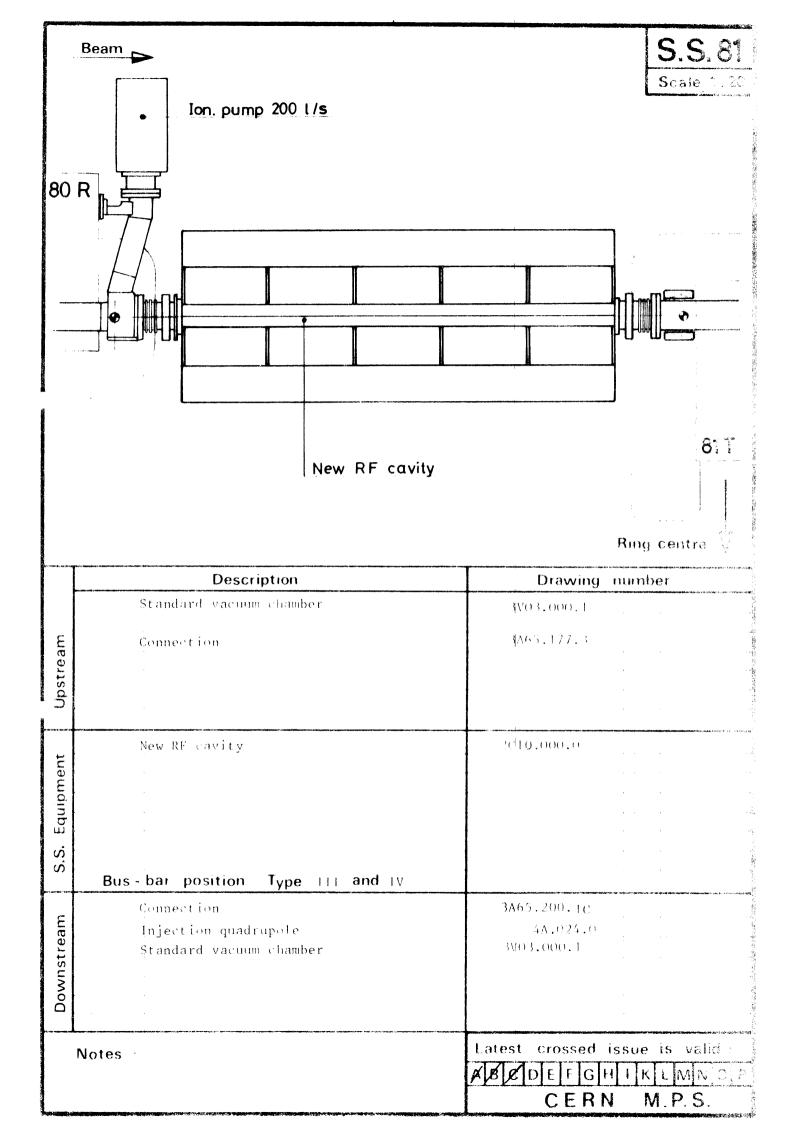
[Beam 🕞	Standard injection sextupole
-	76 R Fast bumper Ion. pump 400 I/s	77T Ring centre
- 1	Description	Drawing number
Upstream	Standard vacuum chamber Standard compact pick up Connection	3V034000.1 2P024100.0X 3A654100.10
S.S. Equipment	East humper Standard injection sectopole Bus-bar position Type 1 and 11	2A55.000.0 3005.000.1
Downstream	Connection Standard injection quadrupole Standard vacuum chamber	2A55.002.2 4A.024.0 3V03.000.1
L. 1	Notes	Latest crossed issue is valid : ABCBEFGHIKLMNO CERN M.P.S.

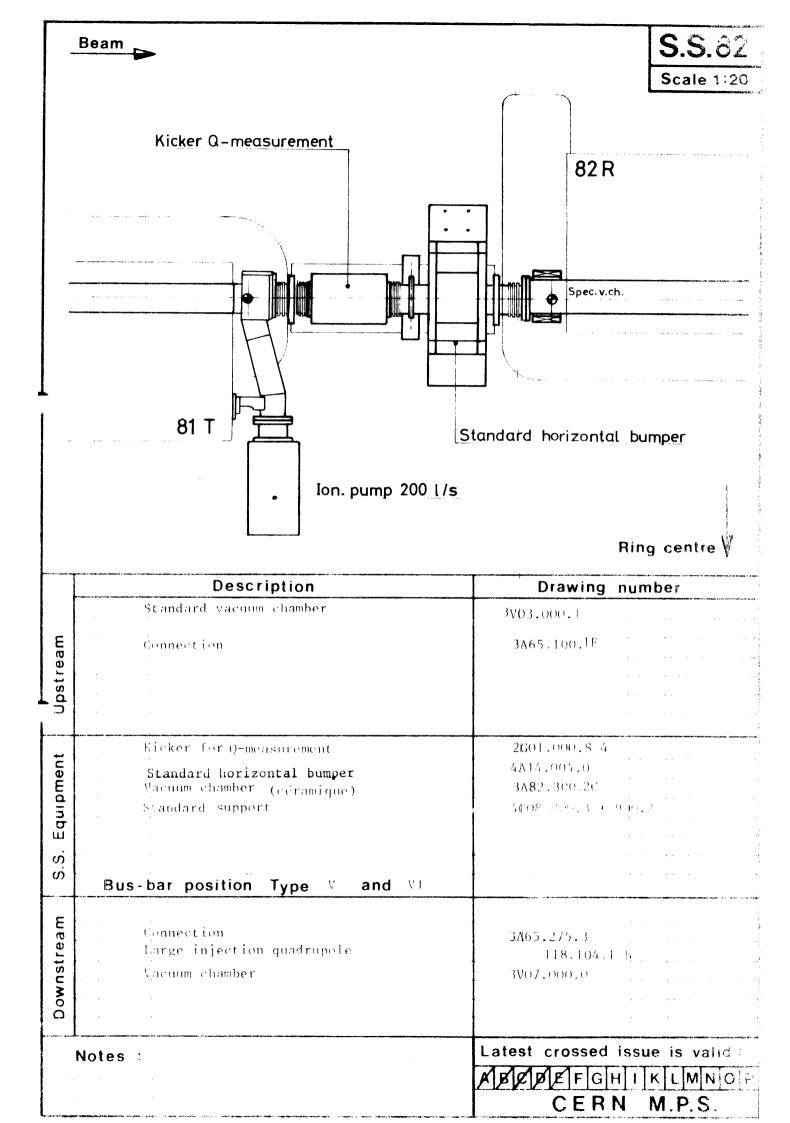


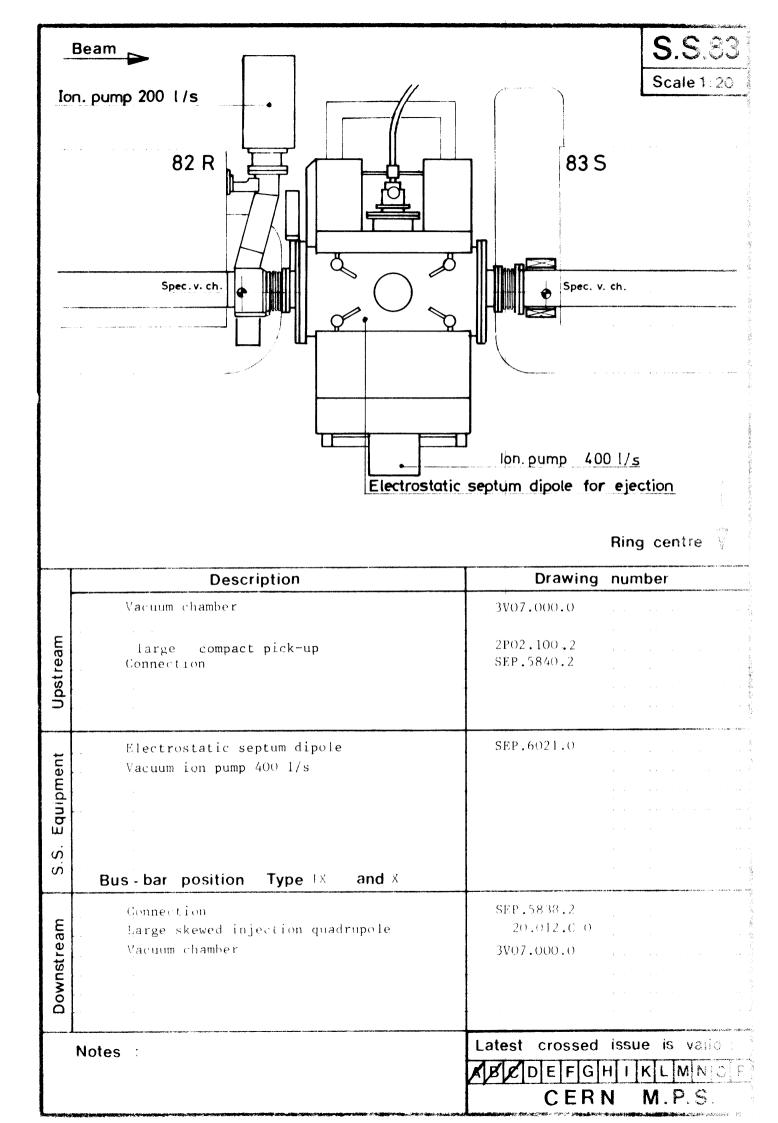
-	Beam	S.S. 79
	Ion Pump	and the second
	400 l/s 400 l/s	
		79 S
	$ \downarrow \land $	
		The Market Market
8 (†* 1-4		
	0	
		1
		+
	Ion Pump	E.H. Anartura Kishan
	400l/s	Full Aperture Kicker
	Turbemalagular, Dump, 000, TUD	Ring centre 🕅
	Turbomolecular Pump 900 THP	tung control y
ļ	Description	Drawing number
	Standard vacuum chamber	3V03.000.1
٤		
eam	Standard vacuum chamber	3V03.000.1
stream	Standard vacuum chamber	3V03.000.1
Upstream	Standard vacuum chamber	3V03.000.1
Upstream	Standard vacuum chamber	3V03.000.1
	Standard vacuum chamber	3V03.000.1
	Standard vacuum chamber Connection	3V03.000.1 2A34.125.2
	Standard vacuum chamber Connection Full aperture kicker	3V03.000.1 2A34.125.2
	Standard vacuum chamber Connection Full aperture kicker	3V03.000.1 2A34.125.2
Equipment	Standard vacuum chamber Connection Full aperture kicker	3V03.000.1 2A34.125.2
	Standard vacuum chamber Connection Full aperture kicker	3V03.000.1 2A34.125.2
.S. Equipment	Standard vacuum chamber Connection Full aperture kicker	3V03.000.1 2A34.125.2
S.S. Equipment	Standard vacuum chamber Connection Full aperture kicker Bus - bar position Type IX and X	3V03.000.1 2A34.125.2 2A34.300.0
S.S. Equipment	Standard vacuum chamber Connection Full aperture kicker Bus - bar position Type IX and X Connection	3V0 3.000.1 2A34.125.2 2A34.300.0
S.S. Equipment	Standard vacuum chamber Connection Full aperture kicker Bus - bar position Type IX and X	3V03.000.1 2A34.125.2 2A34.300.0
S.S. Equipment	Standard vacuum chamber Connection Full aperture kicker Bus - bar position Type IX and X Connection Skew quadrupole + vert. dipole	3V0 3.000.1 2A34.125.2 2A34.300.0
.S. Equipment	Standard vacuum chamber Connection Full aperture kicker Bus - bar position Type IX and X Connection Skew quadrupole + vert. dipole	3V03.000.1 2A34.125.2 2A34.300.0
S.S. Equipment	Standard vacuum chamber Connection Full aperture kicker Bus - bar position Type IX and X Connection Skew quadrupole + vert. dipole	3V03.000.1 2A34.300.0 2A34.300.0 2A34.305.2 4A.025.4 3V03.000.1
Downstream S.S. Equipment	Standard vacuum chamber Connection Full aperture kicker Bus - bar position Type IX and X Connection Skew quadrupole + vert. dipole	3V03.000.1 2A34.125.2 2A34.300.0
Downstream S.S. Equipment	Standard vacuum chamber Connection Full aperture kicker Bus - bar position Type IX and X Connection Skew quadrupole + vert. dipole Vacuum chamber	2A34.305.2 2A34.305.2 4A.025.4 3V03.000.1
Downstream S.S. Equipment	Standard vacuum chamber Connection Full aperture kicker Bus - bar position Type IX and X Connection Skew quadrupole + vert. dipole Vacuum chamber	3V03.000.1 2A34.300.0 2A34.300.0 2A34.305.2 4A.025.4 3V03.000.1

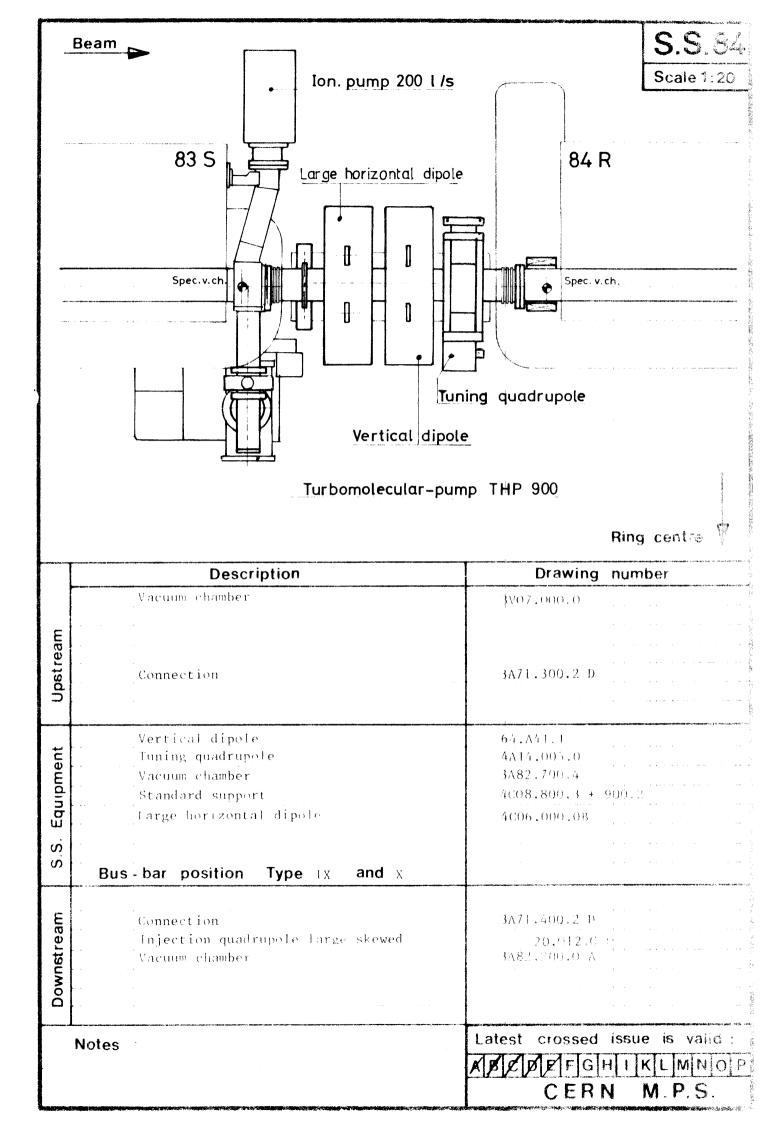


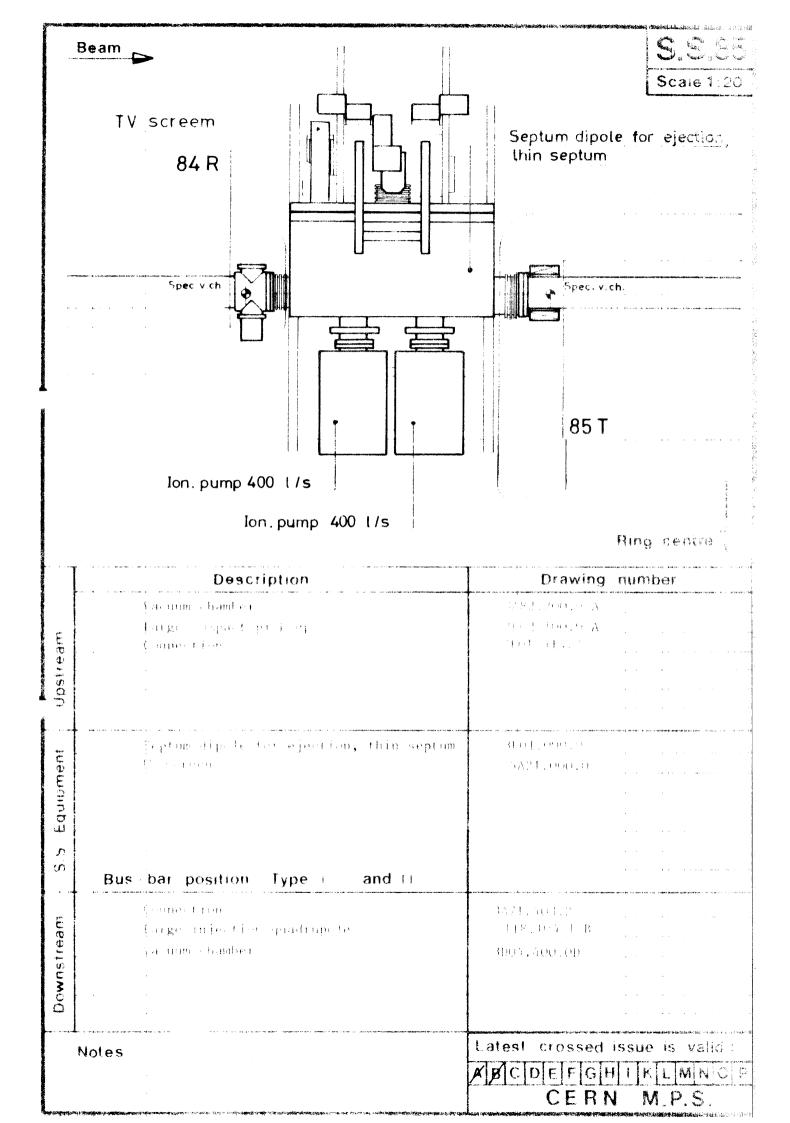
		Description	Drawing	number
		Standard vacuum chamber	3003.000.1	
Upstream		Standard compact pick-up Connection	2P02.100.0 A 3A65.100.1E	
- Nps				· · · · · · · · · · · ·
ment		Standard horizontal bumper Vacuum chamber Standard support	4A14.004.0 3A65.732.4 4C08.800.3 + 5	900.2
Equipment	• • • • •	Vacuum valve between sectors 8 and 9		
S.S.	Bus	bar position Type $_{1X}$ and $_X$		
Downstream		Connection Skew quadrupole + vertical dipole Standard vacuum chamber	3A65.200.1C 4A.025.4 3703.000.1	
	l Notes		Latest crossed	HIKLMNGP



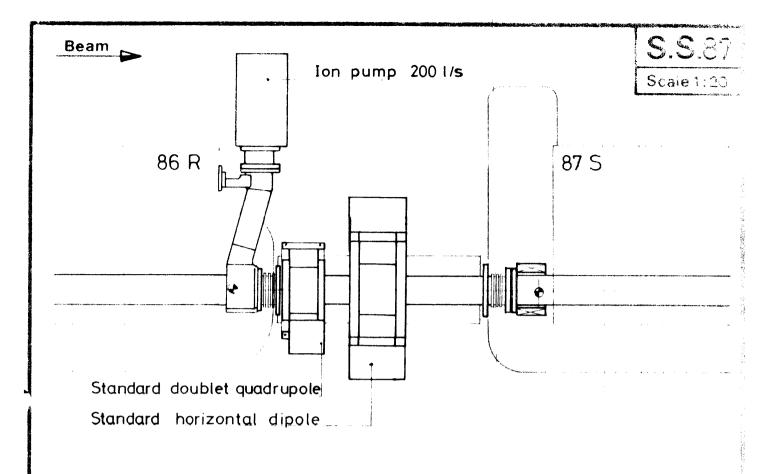




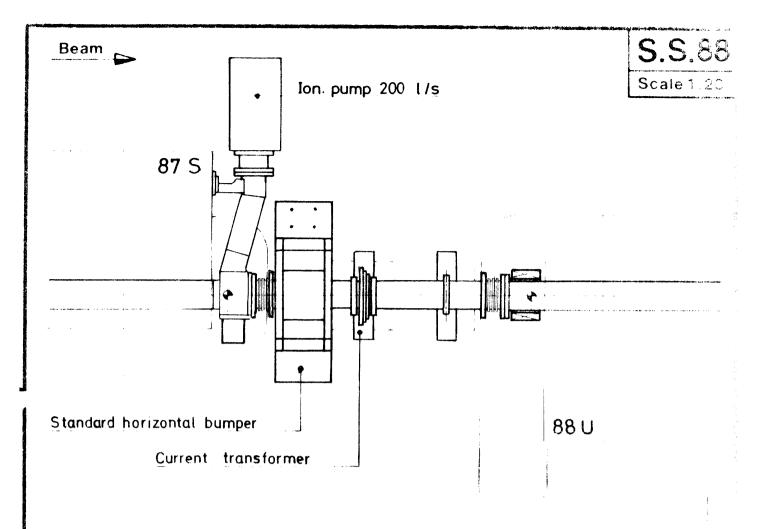




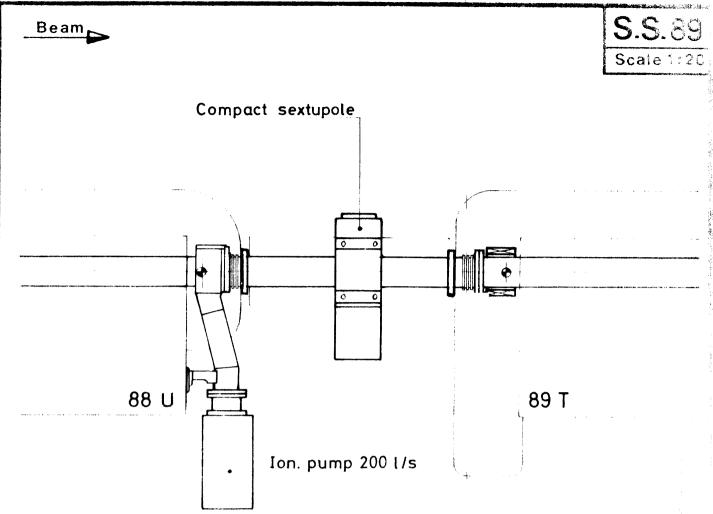
	Beam -	S. S.86
		Scale 1020
		86 A
Spec.		
85		
0.5	New RF cavity	
	Ion. pump 200 l/s	
		Ring depute
	Description	Drawing number
	Vacuum chamber	3004.400.00
am	Connection	3682.401.2
Upstream		
5		
	New RF cavity	2010.000.0
Equipment		
idinb		
யீ ல		· · · ·
S.S	Bus-bar position Type VII and VIII	
E	Sonnection	3A65.200.1C
Downstream	Injection quadrupole Standard vacuum chamber	4A.024.0 3V03.000.0
Suw		
ă		
	Notes	Latest crossed issue is valid.
		A B C D E F G H I K L M N O P
-		CERN M.P.S.



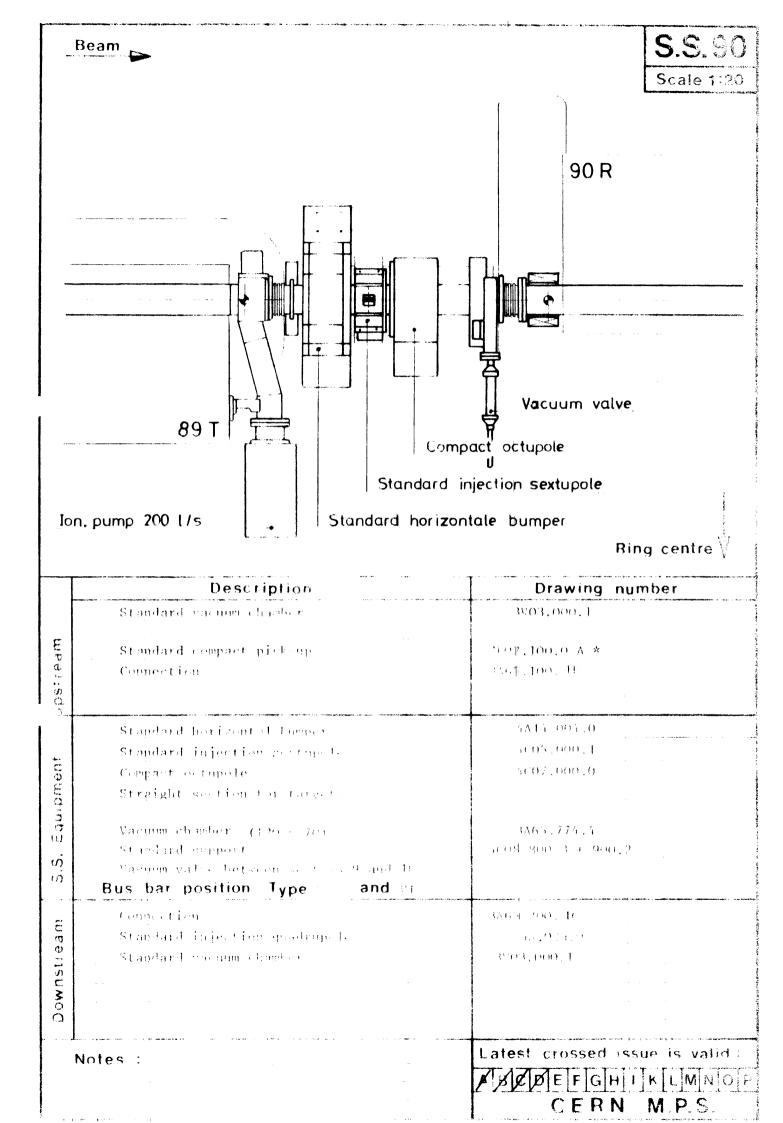
}	Description	Drawing	number
u	Standard vacuum chamber Standard compact pick up Connection	3¥03.000.1 2P02.100.0 A* 3A65.100.1E	
Upstream			6
1 ŝ			
quipment	, Standard doublet quadrupole , Tuning quadrupole Vacuum chamber (inconel)	4010.000.0 4006.000.0B 3A65.765.	
	Standard support	1	νoμ.,?
μ	. Standard horizontal dipole	4414.004.0	به ۱۰۰۰ ۱۰۰۰
S.S	Bus-bar position Type in and in		· · · · · · · · · · · · · · · · · · ·
eam	Connection Skew quadrupole + vertical dipole Stundard vacuum chamber	3A65.200.1C 4A.025.4 3V03.000.1	
Downstream			
	Notes	Latest crossed	issue is valid :
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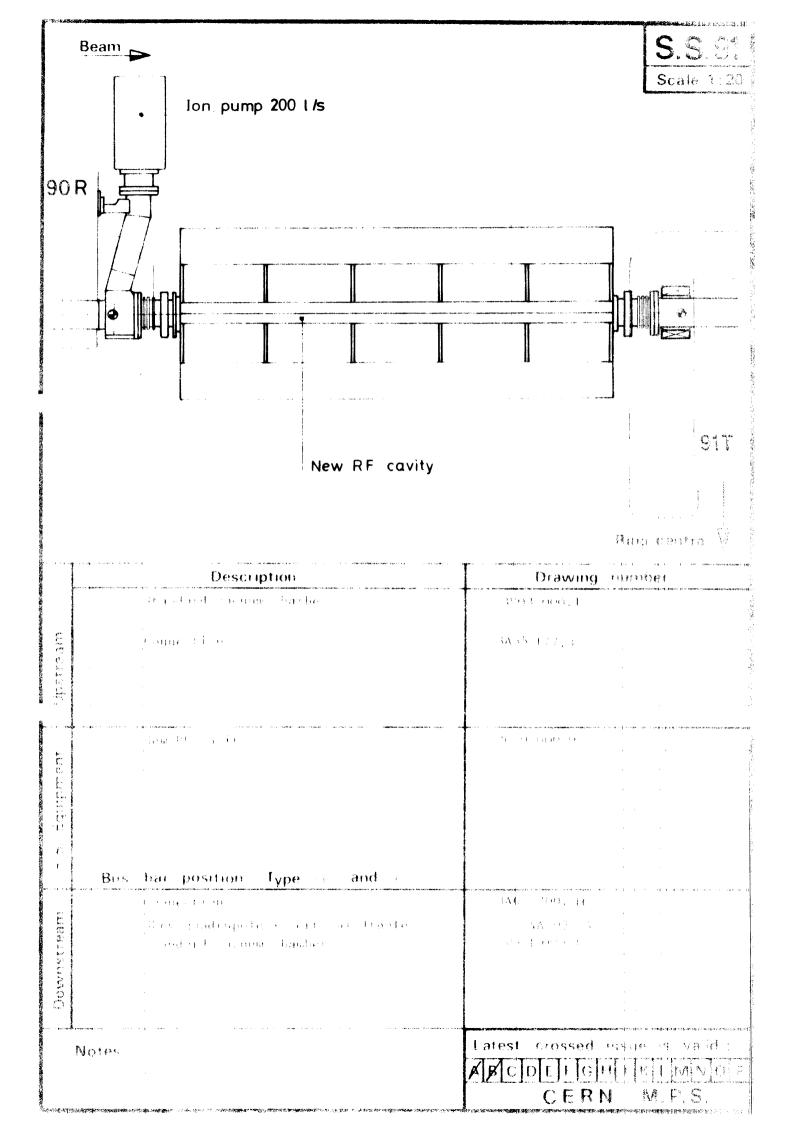


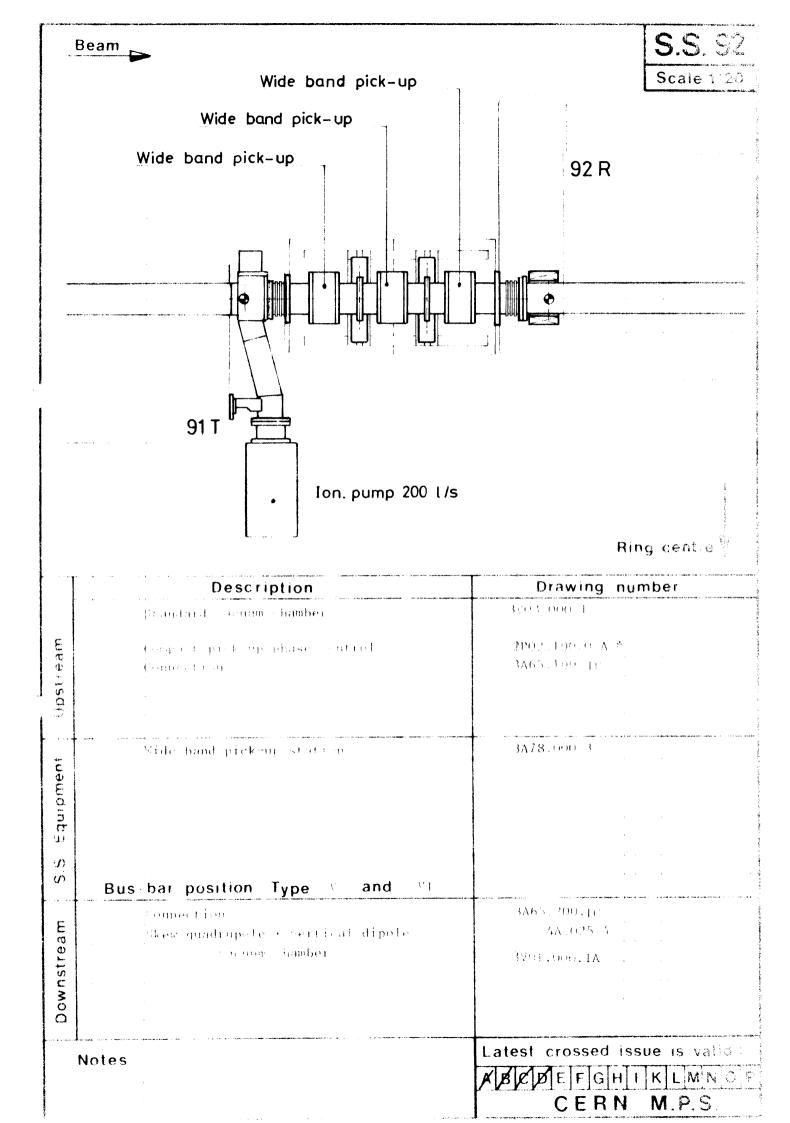
	Description	Drawing number	
	Standard vacuum chamber	3\'(\]3.000.1	
Upstream	Pick-up phase control Connection	102-100.0 A * 3865-100. 11	
nps			
ot D	Standard herizontal bumper	iA14.004.0	
Equipment	Vacuum chamber Stindard support Current Fransformet	3465,757.4 4008,800,3+900,2 5424,000 0	
S.S	Bus bar position Type and		
Downstream	Connection Skew quadrupole + vertical dipole Standard vacuum chamber	3065,200,17 48.025.4 3V03.000.1	
Notes :		Latest crossed issue is valid :	
		CERN M.P.S.	

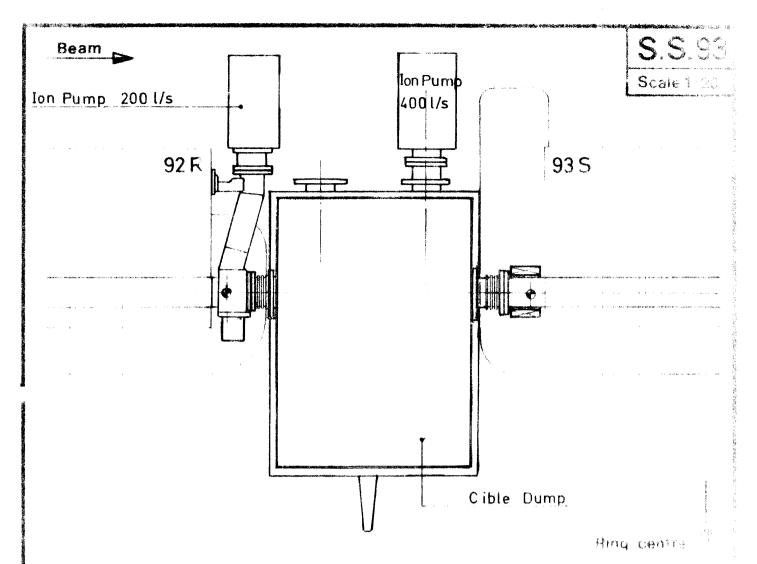


	Description	Drawing	number
Upstream	Standard vacuum chamber	₹V03.000.1	
	Connection	3A65.100.11	н н н н 1 н н н н
			,
			• • • • • •
tz	Compact sextupole	40.013.3	a and proven an address of the second sec
Equipment	Vacuum chamber	3A65.733.4	· · · ·
dui	Standard support	4008.800.3 + 90	¥1, 2
ш v			· · · · · · · · · · · · · · · · · · ·
S.	Bus-bar position Type XI and XII		••••••••••••••••••••••••••••••••••••••
٤	Connection	3A65.200.1C	
Downstream	Standard injection quadrupole Standard vacuum chamber	4A,024.0 3V03.000.1	· · · · · · · · · · · · · · · · · · ·
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 	Notes :	Latest crossed	issue is valia
		for the stand of t	HIKLMNO
			M.P.S.

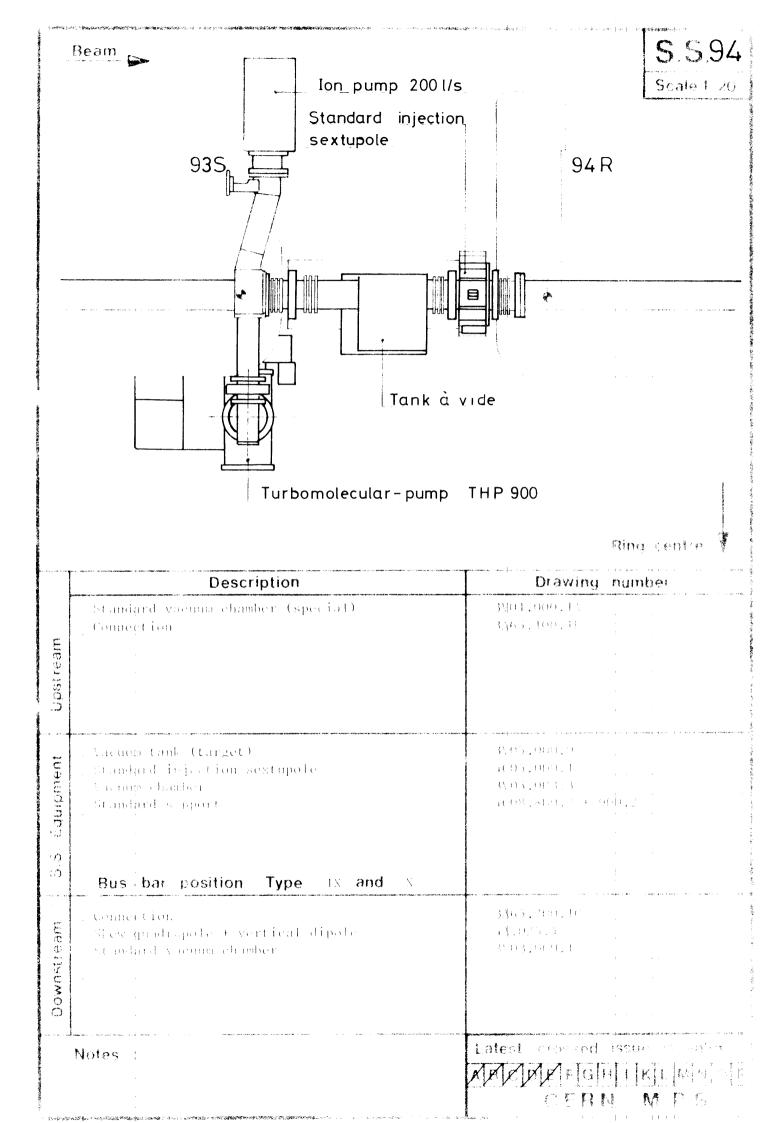


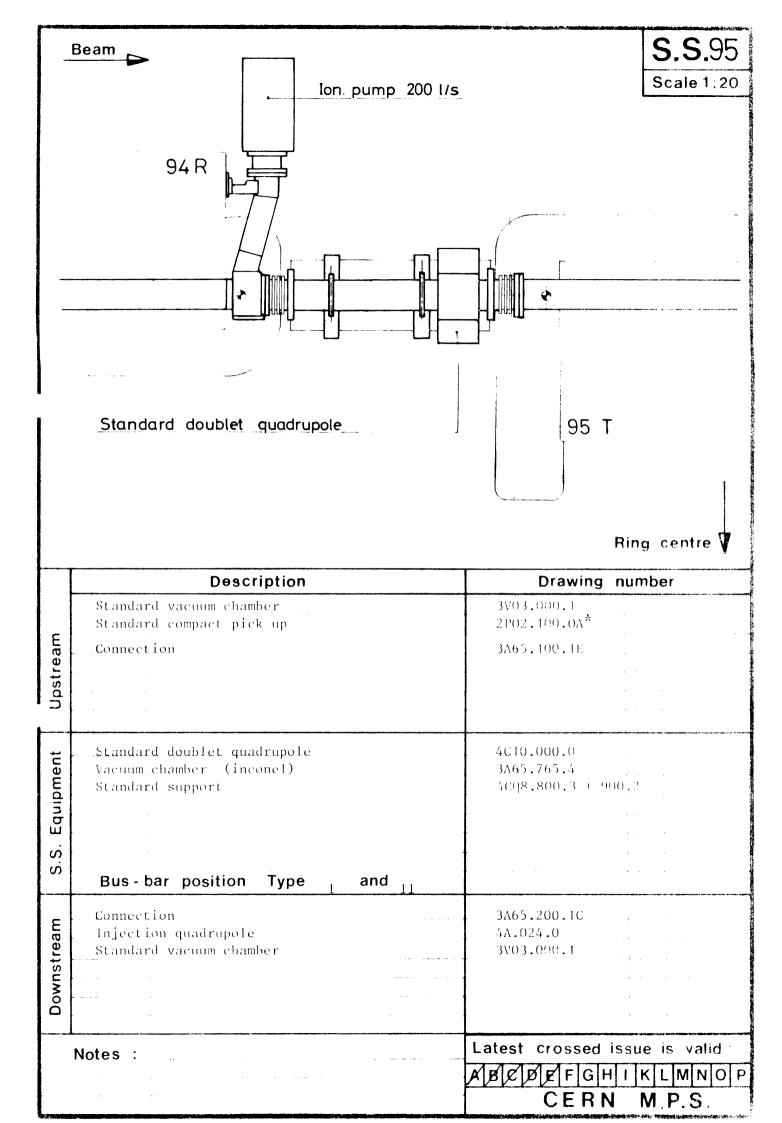






•• ••••••	partes e po recor os targo recordos tares (Description	Drawing	number
	olanini francis - namo - notinatan tanà	studicticacuum chamber (special)	57.131 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -	. Les transforment désentents serves analysis :
am		Standarf - mpact pick-up	2 0 02 Him Q A	
Upstream				
d D				· · · · · ·
يون وي د يرو وي	n saan 14 merin in seeneerin tooseesseleing E	in a second construction of the second	5,B11-000.0	(a) (b) (b) (b) (b) (b) (b) (b) (b) (b) (b
nen				4 19 - 19 - 19 - 19 - 19 - 19 - 19 - 19 -
Equipment				۵۰ مد ا ۱ ۱۰۰۰ میلا میلا
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in an aire a Nei fi	Bus -	bar position Type IX and X	and a second	, it is the set of minimum transference constants λ or $\lambda = 0$, and \lambda = 0 , and
ream		tine andrupole large de Sacrod vacuum chamber (special)	$\frac{20,012,00}{0,012,00}$	
Downstream				
	Notes	an a	Latest crossed	na na manana ana ana ana ana ana ana ana
	×₩4,263,00		APPPPFGI	IIKLMNO
			CERI	M. P. S.





	Beam	S.S.96 Scale 1 20
in the second particular second s		96 R
95	New RF cavity Ion. pump 200 l/s	Rine contro
	Description Standard vacuum chamber	Drawing oumber 3V03.000.1
lipstream	Pick-up beam control Connection	2P02.100.00 A 3A65.177.3
S. Equipment	New RF cowity	2010.000.0
Downstream	Bus - har position Type VII and VIII Connection Injection quadrupole Standard vacuum chamber	3A65.2024.0 4A.024.0 3V20.000.1
	Notes	Latest crossed issue is valid ECDEFGHIKLMNOP CERN M.P.S

