

## **SMH 57**

Date:1/3/2010

### **installed in the PS:**

SMH 57-1. Magnet yoke A with coil (57-3.12) has been installed in vacuum vessel during summer 2003.

### **Spare: Second choice spare removed from ring 1/2010**

SMH 57.2,

yoke C, coil 57.3-11

This magnet including tank, was taken out of the PS in January 1997, and repaired in March 1998 (new feedthrough, connecting bars, yoke modifications and new generation coil installed). Radioactive and put back in operation/installed 1/2003

### **Present state of the spares:**

- 1 radioactive (0.9 mSv/h at 40 cm from tank,) second choice spare SMH57-2, previously installed in PS from 2003-1/2010, but leaked tested ok before removal from ring.
- Chassis used for spare is different from the one in the PS. Spare flexible stripline available. Also support to hold stripline in place in the machine for when magnet has been removed is available.
- 1 coil (coil 57.3-10), new generation. Building 169 S 029. Coil has been damaged during chroming, and has been repaired, but therefore not been silver plated.
- 1 coil (57.3-13), new generation, ready to be used. Building 169 S 029.
- 1 spare magnet block new generation yoke B, with coil 57-3.9 on which a leak was detected during shut down 2002 (November 2002, leak rate  $1 \cdot 10^{-7}$  mbar.l/s with 15 bar He in hydraulic circuit) To be repaired. Very radioactive:  $> 10$ mSv/h at 10 cm
- tube to replace magnet in PS exists (vacuum group).

### **Procedure to replace magnet:**

Document to prepare the replacement and perform dose estimate and follow up was elaborated together with RP. Chassis remains in PS, tank is replaced as a total. There is a support that keeps the stripline upright during the time the magnet is not in place in the machine (building 169 R 001).

### History

Tank	Yokes	Coils	Installation date	Removal date	remarks
SMH57.2	B	57(1 <sup>st</sup> generation) 3		4/7/1994	Leak on hydraulic circuit
SMH57.1	C	57(1 <sup>st</sup> )4	4/7/1994	12/6/1995	Leak on hydraulic circuit
SMH57.2	A	57(1 <sup>st</sup> )2	12/6/1995	1/1997	Leak on hydraulic circuit
SMH57.1	B	57.3.9	1/1997	1/2003	Leak on hydraulic circuit $10^{-7}$ mbar.l/s
SMH57.2	C	57.3.11	1/2003	1/2010	Coil tested ok before removal. Preventive replacement.
SMH57.1	A	57.3.12	1/2010		