

Ladle Gas Purging System Refractories



Products

Metamin Mümessillik Sanayi ve Ticaret A.Ş.

Tünel Meydanı, Tünel Geçidi ve İşhanı,

C-Blok No.: 10/129

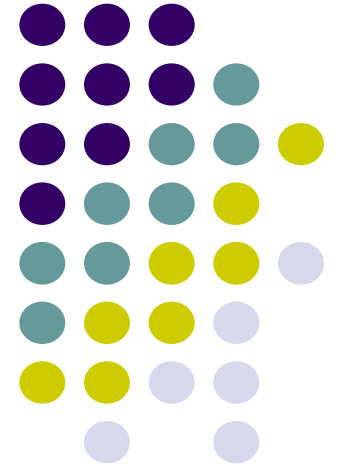
34430 Beyoğlu – İstanbul / Turkey

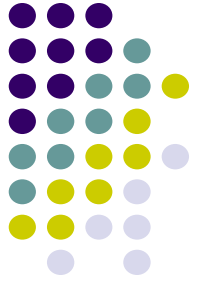
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Metamin gas purging system

- Directional gas purging plugs
 - Slit type
 - Ceramic plate type
- Non-directional -porous type plugs
- Sleeves
 - Preinstalled set with purge plug
- Well blocks
 - Standard and special dimensions
- Mounting plate
- Distance ring
- Installation mortar and castable mixes



Production

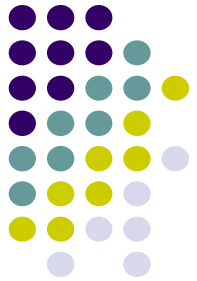
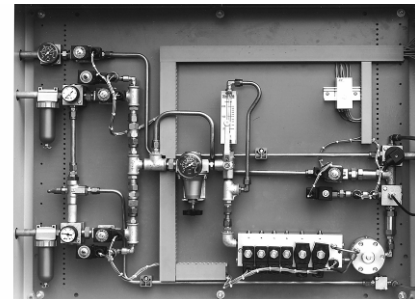
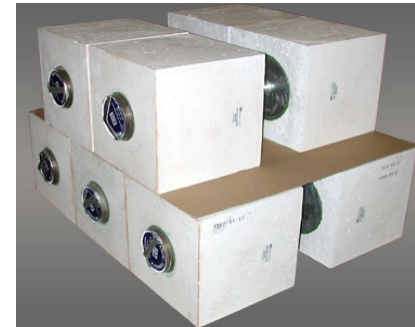


- Raw material preparation
- Prefabricated production methods
- Thermal-treatment of refractories in furnaces
- Steel confectioning of purge plugs made in our own production site

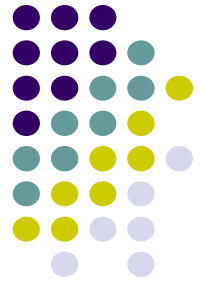


Supply program

- Refractory items for gas purging system
 - Installation mortars
- Installation and hot/cold repair castable mixes
 - Safety devices
- Gas flow control/test stations
- Precise control before delivery
 - Supervision and engineering



Position description



PP1a/S16E-W purge plug

PP	Purge plug
1a	Shape group
S16	16 slits
CP	Ceramic plate
E	Wear indicator
W	Withdrawal jack adaptor



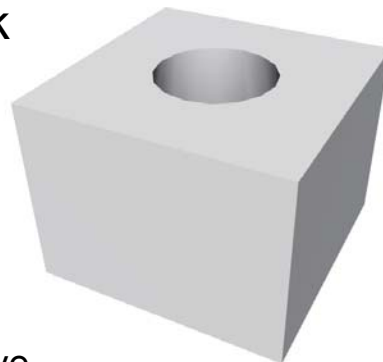
S1a sleeve

S	Sleeve
1a	Shape group



WB-SQ1-S well block

WB	Well block
SQ	Square
R	Round
1	Shape group
S	Block with sleeve



DR80/60

Distance ring

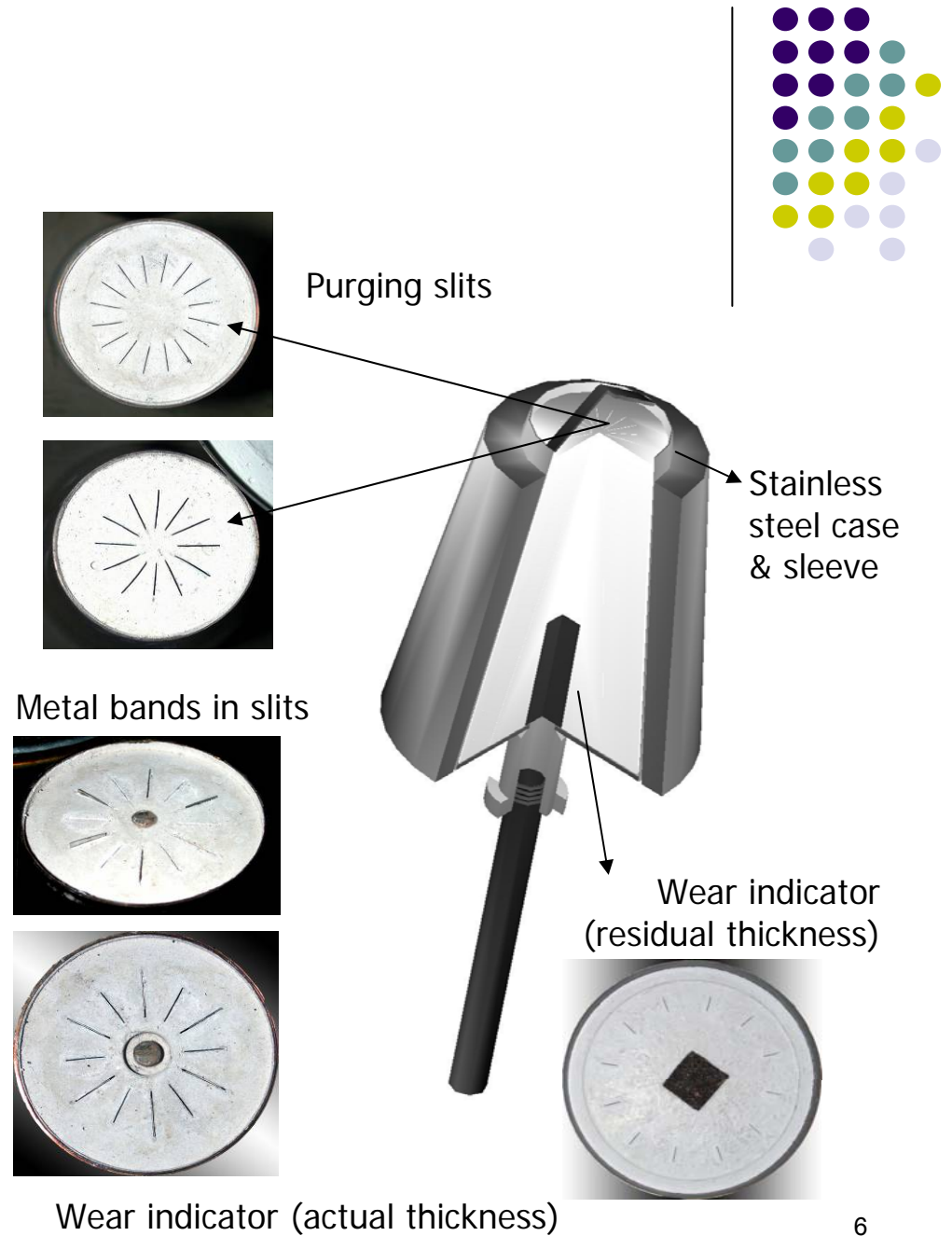
DR	Distance ring
80	Height of ring in mm
60	Inner hole diameter in mm



Shape group; 1a = 270mm 2, 2a, 2b = 360mm 3 = 450mm 4 = 520mm

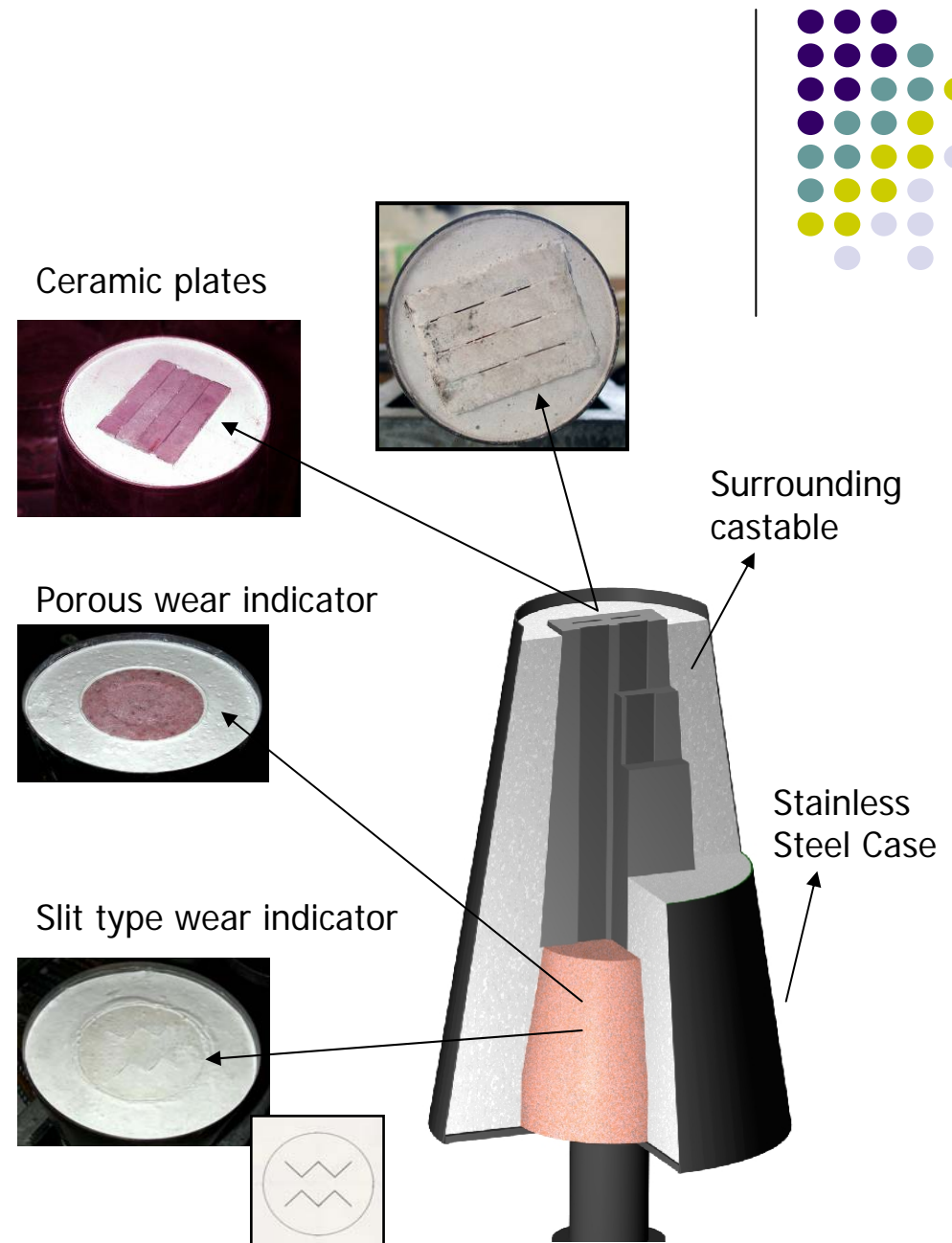
Purge plugs

- Slit type (S) purge plug
 - MA-spinel raw materials (Metacast[®]-1850/MA)
 - Slits are radially oriented
 - Optimum number of slits & dimensions
 - Optical wear indicator
 - Residual thickness
 - Actual thickness



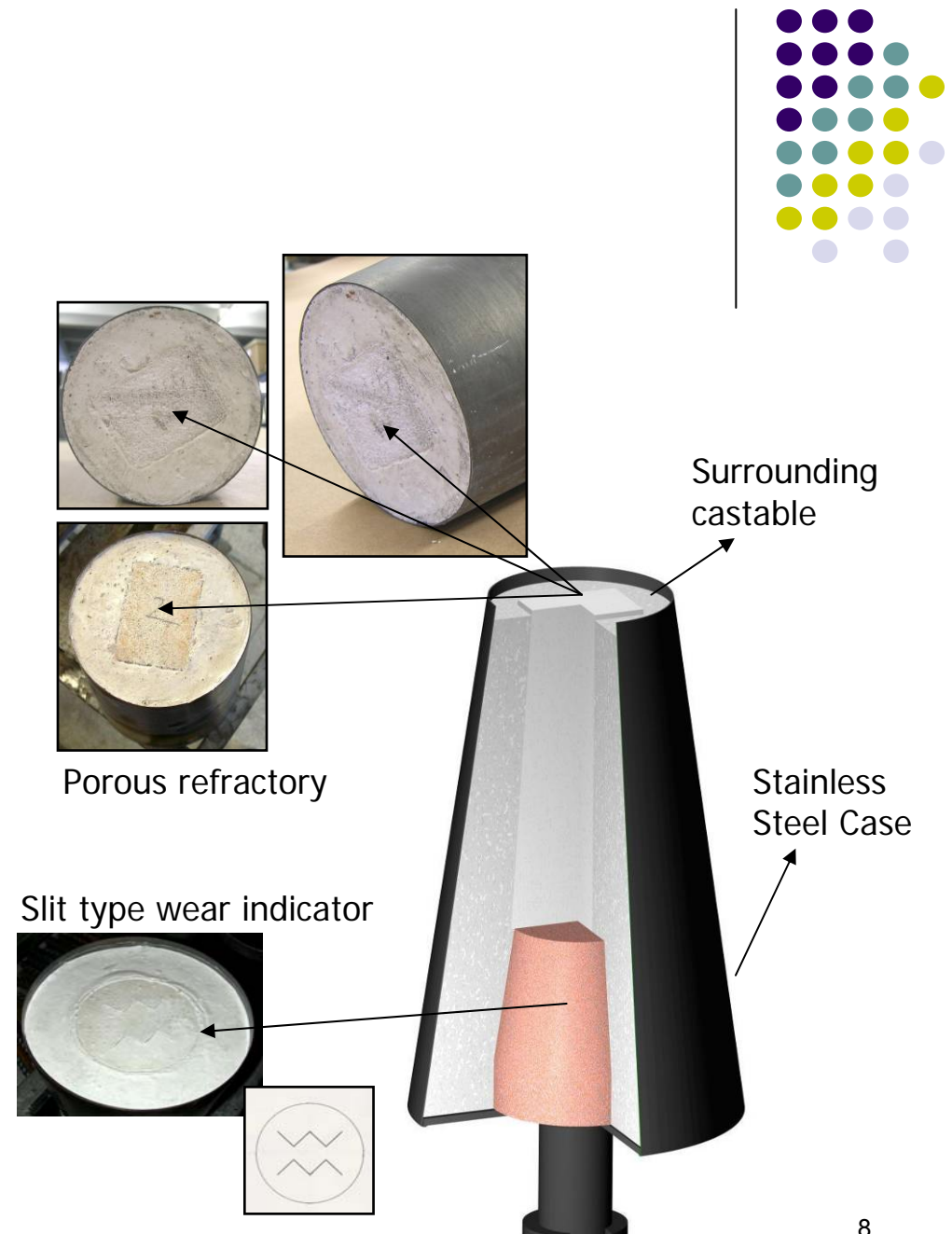
Purge plugs

- Ceramic plate (CP) purge plug
 - Plates made of high alumina raw materials ($\text{Al}_2\text{O}_3=90.0\%$)
 - Surrounding castable MA-spinel raw materials (Metacast[®]-1850/MA)
 - Optical wear indicator
 - Porous type
 - Slit type



Purge plugs

- Porous (POR) purge plug
 - Porous body made of high alumina raw materials ($\text{Al}_2\text{O}_3=95.0\%$)
 - Surrounding castable MA-spinel raw materials (Metacast[®]-1850/MA)
 - Slit type optical wear indicator

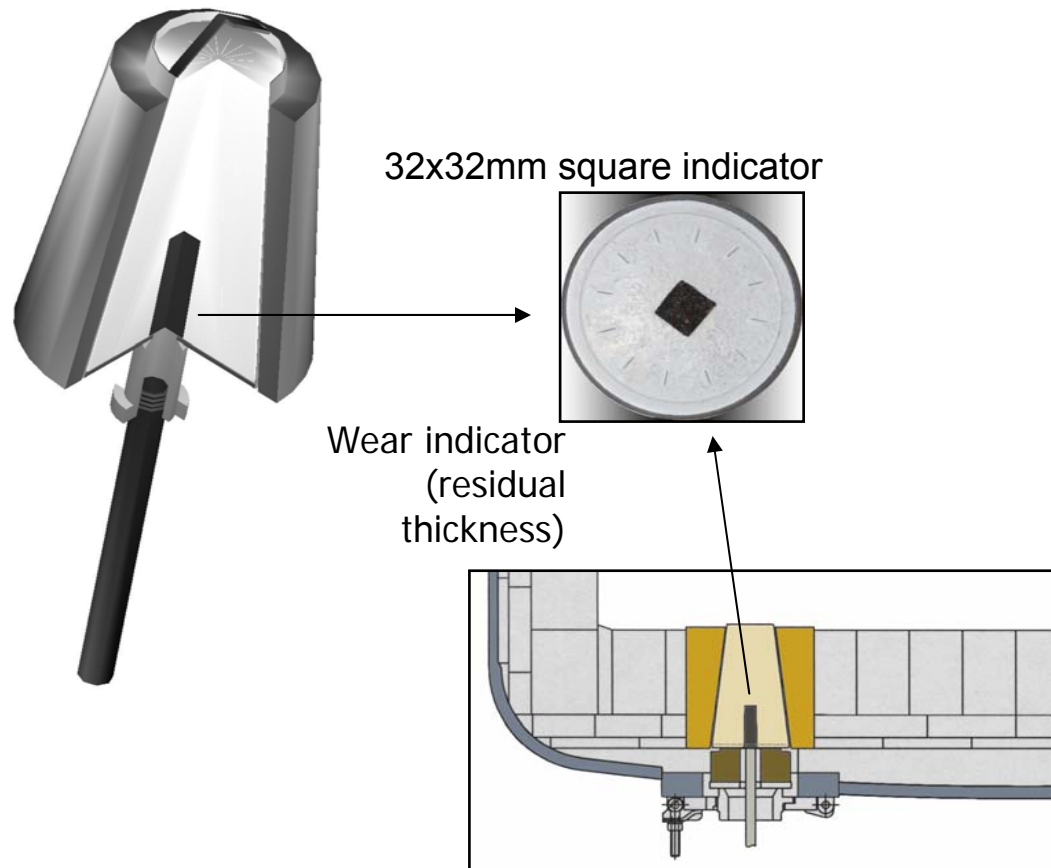




Wear indicator

Optical wear indicator for ladle gas purging plug

Optical wear indicator is a porous high alumina refractory material with 32x32mm square cross-section at a residual thickness of 120mm of purge plug. When the purge plug is at residual thickness of 120mm after several heats of use, the indicator becomes visible during cleaning of ladle after continuous casting. Due to porous nature of high alumina wear indicator, a spot 32x32mm in dark color becomes visible when observed from inside the ladle. When the indicator becomes visible, the purge plug has to be replaced with a new one immediately.



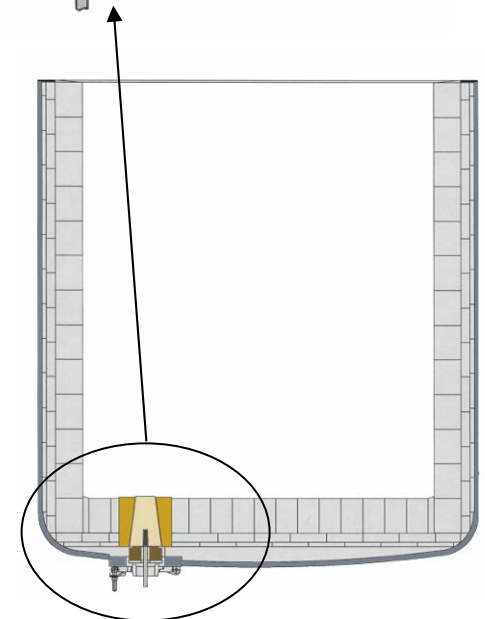
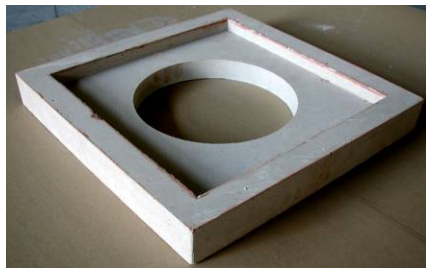
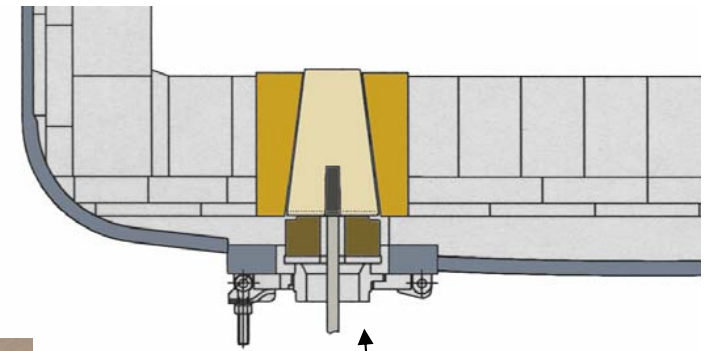
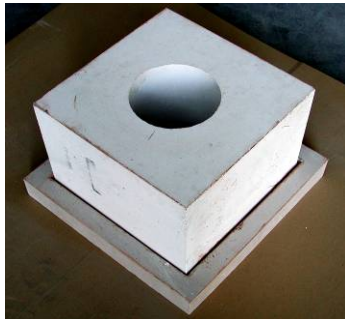


Purge plugs

- Connection pipe
 - (diameter, length & thread types available)
- Withdrawal jack adaptor
 - (various types available)
- Lifting hook on purge plugs
 - Preinstalled sets
 - Purge plug & sleeve
 - Purge plug & well block

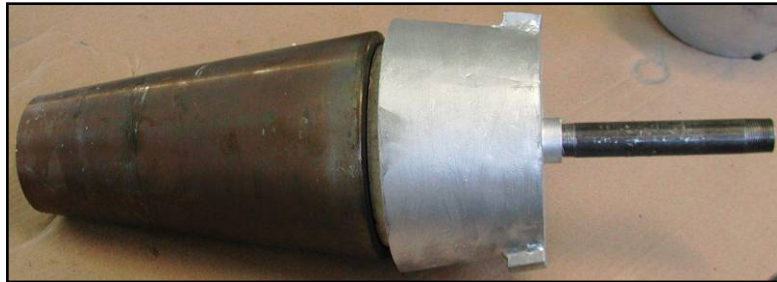


System refractories

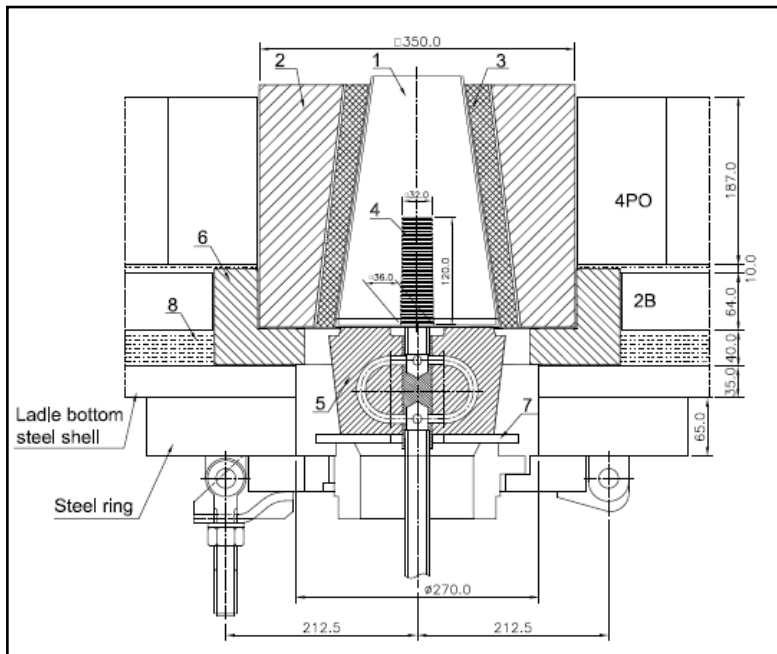


- Well block (square, round)
 - Sleeve
 - Distance ring
 - Mounting plate

Safety device



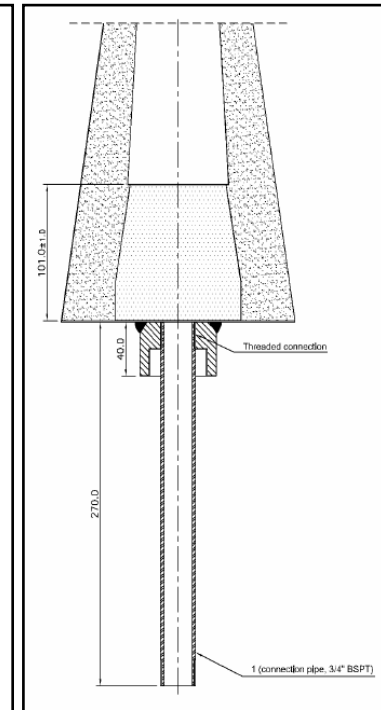
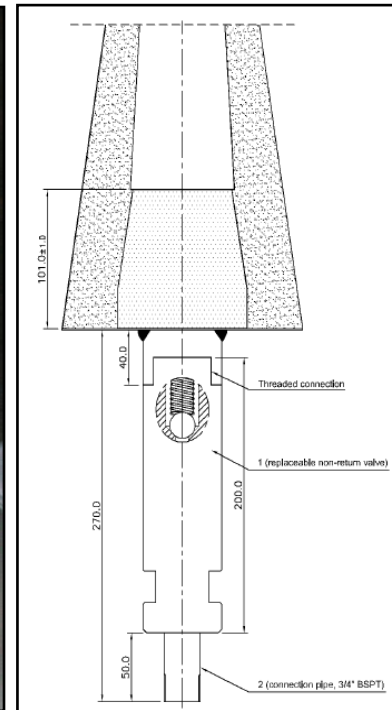
- Replaceable safety device (multi-use)
- Prevents steel leakages through purge plug
- Acts as a distance ring with safety.

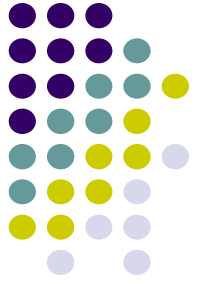




Non-return-valve

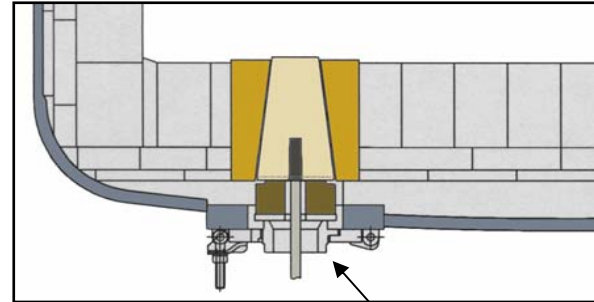
- Prevents steel infiltration due to sudden pressure drops in the line
- Stationary or replaceable types

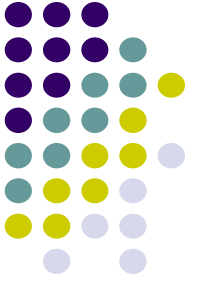




Bayonette-closure

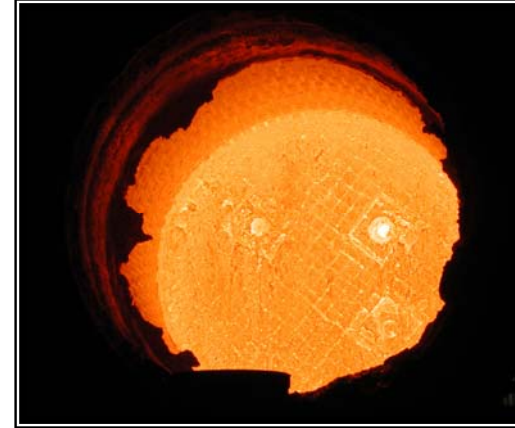
- For closing & opening of gas purging system for plug change.
- Applies pressure to the distance ring & purge plug for proper fitting.
- Special material to withstand operation conditions





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C-Blok No.: 10/129
34430 Beyoğlu – İstanbul / Turkey
E-mail: info@metamin.com.tr

SGS

Certificate TR07/0530

The management system of

METAMİN MÜMESSİLLİK SANAYİ VE TİCARET A.Ş.

Beylikdüzü Organize Sanayi Bölgesi
Birlik Sanayi Sitesi 2. Cadde No:30
34520 Büyükçekmece / İSTANBUL
TURKEY

has been assessed and certified as meeting the requirements of

ISO 9001:2000

For the following activities

The scope of registration appears on page 2 of this certificate.

Further clarifications regarding the scope of this certificate and the applicability of ISO 9001:2000 requirements may be obtained by consulting the organisation

This certificate is valid from 19 July 2007 until 18 July 2010
Issue 1. Certified since 19 July 2007

This is a multi-site certification.
Additional site details are listed on subsequent pages.

Authorised by

P. Earl

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Certificate TR07/0530, continued



**METAMİN MÜMESSİLLİK
SANAYİ VE TİCARET A.Ş.**

ISO 9001:2000



Issue 1

Detailed scope

**Design, production, sales of monolithic refractory and prefabricated
refractory shapes.
Trading of commercial good.**

Further Clarifications regarding the scope of this certificate and the applicability of
ISO 9001:2000 requirements may be obtained by consulting the organisation

Additional facilities

**Tünel Meydanı Tünel Pasajı ve İşhanı
C Blok No:10/129
34430 Beyoğlu / İSTANBUL
TURKEY**

