

AUSTRALIA
Tel: +61 3 921 30 800
Fax: +61 3 921 30 890
enquiry@norgren.com.au

AUSTRIA
Tel: +43 22 36 63 520
Fax: +43 22 36 63 520 20
enquiry@at.norgren.com

BELGIUM & LUXEMBURG
Tel: +32 2 333 44 11
Fax: +32 2 333 44 88
enquiry@be.norgren.com

BRAZIL
Tel: +55 11 5698 4000
Fax: +55 11 5698 4001
vendass@norgren.com.br

CANADA
Tel: +1 303 794 2611
Fax: +1 303 795 9487
inquiry@usa.norgren.com

CHINA
Tel: +86-021-24161800
Fax: +86-021-24161900
info@norgren.com.cn

CROATIA
Tel: +386 4 5317550
Fax: +386 (64) 7000949
info@si.norgren.com

CZECH REPUBLIC &
SLOVAKIA
Tel: +420 465 612 879
Fax: +420 465 612 908
info@cz.norgren.com

DENMARK
Tel: +45 44 91 41 66
Fax: +45 44 91 15 60
norgren@norgren.dk

FINLAND
Tel: +358 95 712 140
Fax: +358 95 712 1440
arki@norgren.fi

FRANCE
Tel: +33 1 60 04 95 95
Fax: +33 1 60 43 18 86
norgren@norgren.fr

GERMANY
Tel: +49 2802 49-0
Fax: +49 2802 49356
info@norgren.de

HONG KONG
Tel: +852 2492 7608
Fax: +852 2498 5878
enquiry@norgren.com.hk

HUNGARY
Tel: +36 1 284 9000
Fax: +36 1 284 8980
info@norgren.hu

INDIA
Tel: +91-120-
3089500/4089500
Fax: +91-120-3089700
enquiry@norgren.co.in

IRELAND
Tel: +353 1 8300 288
Fax: +353 1 8300 082
dublin@norgren.com

ITALY
Tel: +39 039 60 631
Fax: +39 039 60 63 301
info@norgrenitalia.it

JAPAN
Tel: +81 6 6876 8913
Fax: +81 6 6876 8929
toiawase@norgren.co.jp

MALAYSIA
Tel: +60 3 5121 9255
Fax: +60 3 5121 2889
sales@norgren.com.my

MEXICO
Tel: +52 55 1500 64 00
Fax: +52 55 1500 64 30
neumatica@norgren.com.mx

NETHERLANDS
Tel: +31 (0)36 548 6828
Fax: +31 (0)36 548 6838
enquiry@nl.norgren.com

NEW ZEALAND
Tel: +64 9 579 0189
Fax: +64 9 526 3398
enquiry@norgren.co.nz

NORWAY
Tel: +47 22 90 80 80
Fax: +47 22 90 80 81
norgren@norgren.no

POLAND
Tel: +48 22 518 9530
Fax: +48 22 518 9531
biuro@norgren.pl

ROMANIA
Tel: +40 31 425 17 06
Fax: +40 31 425 17 08
office@norgren.ro

RUSSIA
Tel: +7 499 729 56 09
Fax: +7 499 729 57 49
sales@norgren-imi.ru

SINGAPORE
Tel: +65 6862 1811
Fax: +65 6862 1886
sales@norgren.com.sg

SLOVENIA
Tel: +386 4 531 7550
Fax: +386 4 531 7555
info@si.norgren.com

SPAIN
Tel: +34 93 748 9800
Fax: +34 93 783 0838
norgren@norgren.es

SWEDEN
Tel: +46 40 59 51 00
Fax: +46 40 49 50 90
info@norgren.se

SWITZERLAND
Tel: +41 71 973 82 00
Fax: +41 71 973 82 01
norgren@norgren.ch

TAIWAN
Tel: +886 33162673
Fax: +886 33162910
enquiry@norgren.com.tw

THAILAND
Tel: +66 2750 3598/99
Fax: +66 2750 3855
sales@norgren.co.th

UK
Tel: +44 1543 265 000
Fax: +44 1543 265 811
enquiry@uk.norgren.com

USA
Tel: +1 303 794 2611
Fax: +1 303 798 4856
inquiry@usa.norgren.com



The Roundel, 'Norgren' and 'IMI' are registered trade marks.
© IMI Norgren Limited 2009

Due to our policy of continuous development, Norgren reserve the right to change specifications without prior notice.

z7129 en/03/09

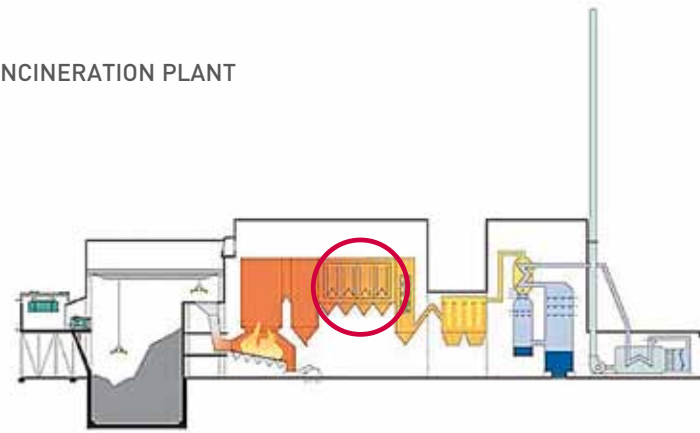
IMPACT SYSTEM

FOR CLEANING OF HEATING
SURFACES AT WASTE INCI-
NERATION PLANTS

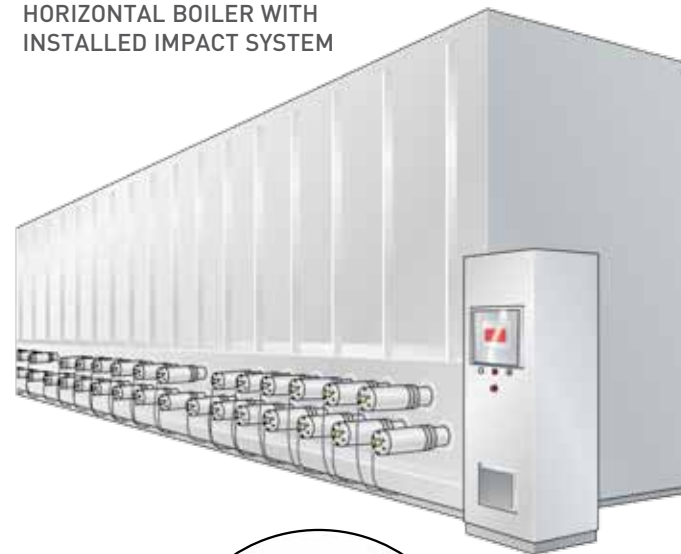
LONGER DURATION
GREATER OVERALL EFFICIENCY
EFFICIENT CLEANING



INCINERATION PLANT



HORIZONTAL BOILER WITH
INSTALLED IMPACT SYSTEM



IMPACT SYSTEM

Exploit the benefits of an experienced partner like Norgren. We improve existing plants and optimise new ones to make them future-ready with focus on economy, efficiency and safety. The pneumatic impact cylinder is used for efficient cleaning of soiled heating surfaces in waste incineration plants. **The adjustable impact energy allows optimised cleaning of the heating surfaces to maintain a consistently high overall efficiency of the evaporator, super-heater and economiser. This means a longer DURATION for your plant.**



Application Single rapping



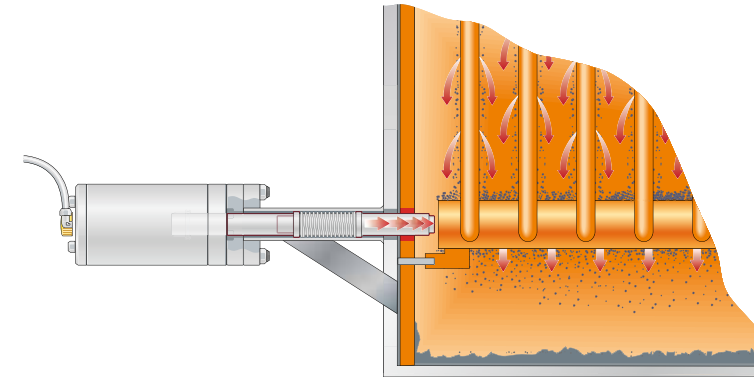
control cabinet



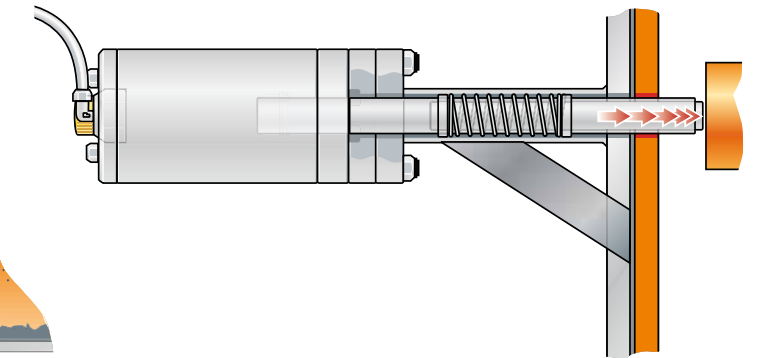
NORGREN SYSTEM CONSIST OF:

- » Impact cylinder for individual single strikes
- » Control cabinet to actuate the impact cylinders using pneumatic valve islands and an operating panel.
- » Components for Profibus or optical fibre selection of individual or group impact points from the control room.
- » OPTIONAL: Mounting flange, plunger, spring
- » OPTIONAL: Pneumatic cylinder for electro-pneumatic wagon system

CLEANING OF HEATING SURFACES



IMPACT CYLINDER, FLANGE, PLUNGER, SPRING



NORGREN PATENT PENDING TECHNOLOGY

- » Adjustable impact energy
- » Force compensation

ADVANTAGES

- » Service-friendly owing to safe repair and maintenance work during operation
- » Reduction of plunger wear due to adjustable impact energy
- » Decreasing of maintenance costs
- » No process interruption
- » Wear indicator on the cylinder for the plunger in the boiler (optional)
- » Force compensation for undamped vibrations

» **Variable, individual and process-oriented cleaning**

Adjustable impact energy



Wear indicator on the cylinder for the plunger in the boiler (optional)



REFERENCES

National:

MVA Leuna Boiler I + II
MVA Sonne (Großräschen)
MVA Premnitz
MVA Hameln
MVA Herten
MVA Cologne
MVA Mannheim

International:

Austria:
MVA AVN Dürnrohr Boiler 1-3
MVA Pfaffenau
Netherlands:
MVA Delfzijl
Great Britain:
WTE Allington*

Switzerland:
KEBAG Emmenspitz, Zuchwil
KVA Cheveniers
KVA Turgi

Russia:
WTE Moskau*

*Electro-pneumatic wagon system