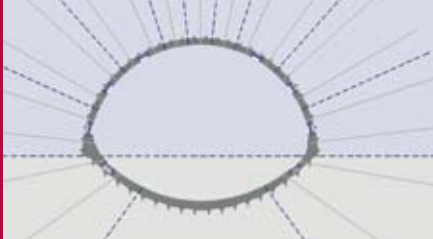
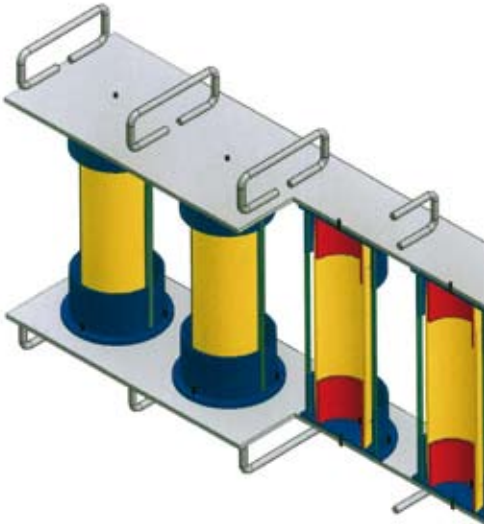
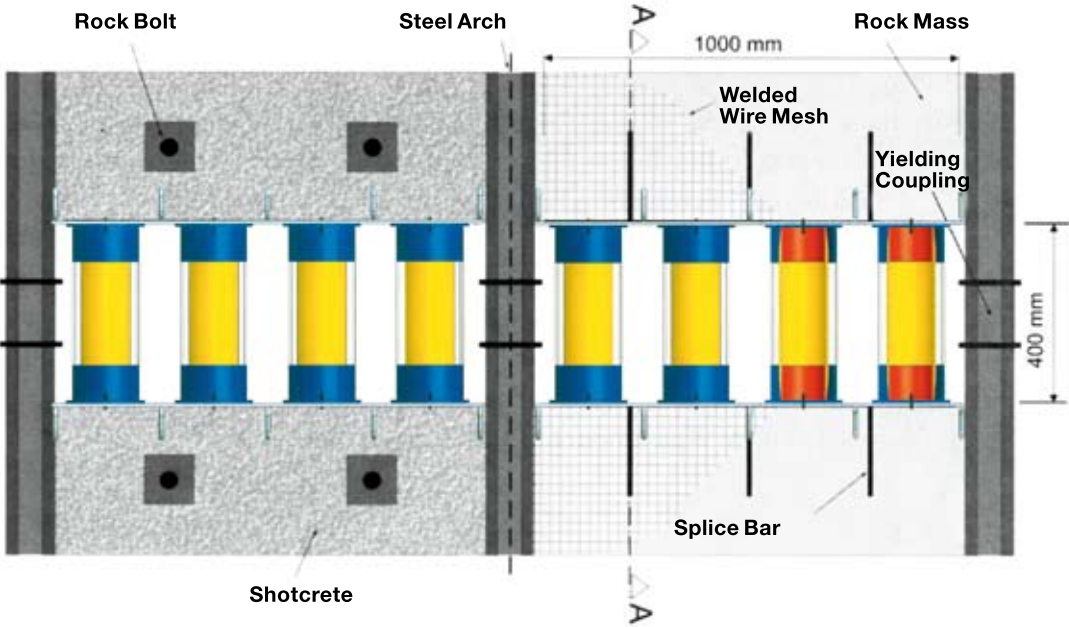


AT - LSC Lining Stress Controllers



Assembly AT - LSC-Lining Stress Controllers



Field of application

- Support for squeezing rock mass conditions
- Application in combination with shotcrete lining or concrete lining segments

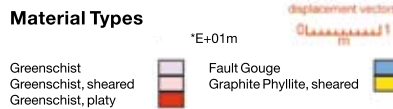
System Description AT - LSC-Lining Stress Controllers

Specifications

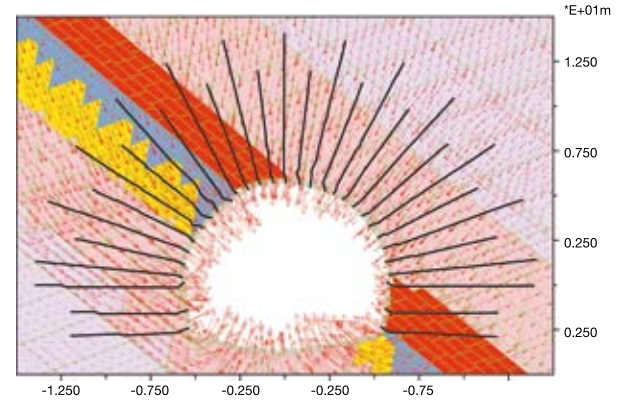
AT - LSC-Lining Stress Controllers are adapted in terms of type, number, and length to the load-bearing capacity of the lining and the displacements of the tunnel wall. ¹⁾

Designation LSC-Lining Stress Controllers	A-II/3	A-II/4
Design load Yielding Element F_p [kN]	700	
Number of Yielding Elements [#]	3	4
Design Load F_{pTOT} [kN]	2100	2800
Deviation Load Cycle to Design Load tol_F [%]	+/- 15%	
Shortening required to reach the Design Load l_{pmin} [mm]	60	
Length [mm]	800-1000	
Width [mm]	250-350	
Height [mm]	430	

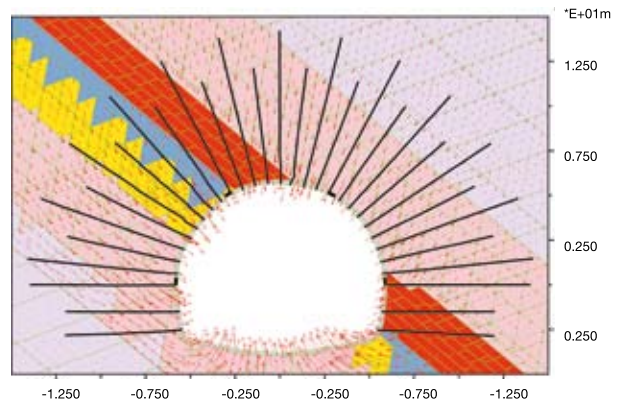
1) AT - LSC-Lining Stress Controllers with alternative dimensions available on request



Without AT - LSC-Lining Stress Controllers



With AT - LSC-Lining Stress Controllers



Advantages AT - LSC-Lining Stress Controllers

- Warranty of supporting forces of the tunnel lining for squeezing rock mass conditions
- Controlled stress distribution and yielding ability
- Avoidance of overstraining of the tunnel lining in terms of rupture processes and consequential damages
- Optimum utilization of the load-bearing capacity of the shotcrete lining
- Well-defined load-deformation characteristics
- Displacement-controlled limitation of axial forces
- Project-specific adjusted geometry
- Tunable to the rock mass conditions by means of computer-aided simulation



Sectional view of a shortened AT - LSC-Lining Stress Controllers

Austria

DYWIDAG-SYSTEMS
INTERNATIONAL GMBH
Wagram 49
4061 Pasching/Linz, Austria
Phone +43-7229-61049-0
Fax +43-7229-61049-80
E-mail: alwag@dywidag-systems.at
www.alwag.com

Belgium and Luxembourg

DYWIDAG-SYSTEMS
INTERNATIONAL N.V.
Industrieweg 25
3190 Boortmeerbeek, Belgium
Phone +32-16-60 77 60
Fax +32-16-60 77 66
E-mail: info@dywidag.be

France

DSI-Artèon
Avenue du Bicentenaire
ZI Dagneux-BP 50053
01122 Montluel Cedex, France
Phone +33-4-78 79 27 82
Fax +33-4-78 79 01 56
E-mail: dsi.france@dywidag.fr
www.dywidag.fr

Germany

DYWIDAG-SYSTEMS
INTERNATIONAL GMBH
Schuetzenstrasse 20
14641 Nauen, Germany
Phone +49-3321-44 18 32
Fax +49-3321-44 18 18
E-mail: suspa@dywidag-systems.com

DYWIDAG-SYSTEMS
INTERNATIONAL GMBH
Max-Planck-Ring 1
40764 Langenfeld, Germany
Phone +49-2173-79 02 0
Fax +49-2173-79 02 20
E-mail: suspa@dywidag-systems.com
www.suspa-dsi.de

DYWIDAG-SYSTEMS
INTERNATIONAL GMBH
Germanenstrasse 8
86343 Koenigsbrunn, Germany
Phone +49-8231-96 07 0
Fax +49-8231-96 07 40
E-mail: suspa@dywidag-systems.com

DYWIDAG-SYSTEMS
INTERNATIONAL GMBH
Siemensstrasse 8
85716 Unterschleissheim, Germany
Phone +49-89-30 90 50-100
Fax +49-89-30 90 50-120
E-mail: dsihv@dywidag-systems.com
www.dywidag-systems.com

Please note:

This brochure serves basic information purposes only. Technical data and information provided herein shall be considered non-binding and may be subject to change without notice. We do not assume any liability for losses or damages attributed to the use of this technical data and any improper use of our products. Should you require further information on particular products, please do not hesitate to contact us.

Italy

DYWIT S.P.A.
Via Grandi, 68
20017 Mazzo di Rho (Milano), Italy
Phone +39-02-93 46 87 1
Fax +39-02-93 46 87 301
E-mail: info@dywit.it

Netherlands

DYWIDAG-SYSTEMS
INTERNATIONAL B.V.
Veilingweg 2
5301 KM Zaltbommel, Netherlands
Phone +31-418-57 89 22
Fax +31-418-51 30 12
E-mail: email@dsi-nl.nl
www.dsi-nl.nl

Norway

DYWIDAG-SYSTEMS
INTERNATIONAL A/S
Industrieveien 7A
1483 Skytta, Norway
Phone +47-67-06 15 60
Fax +47-67-06 15 59
E-mail: manager@dsi-dywidag.no

Portugal

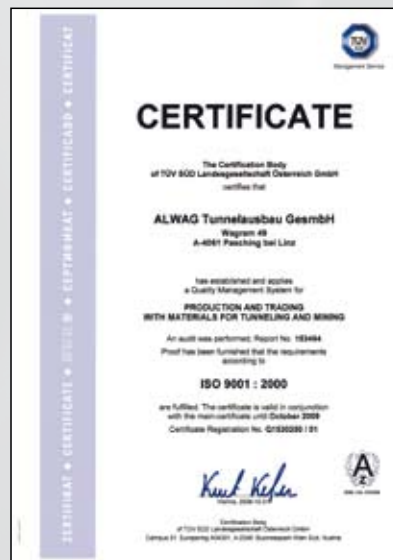
DYWIDAG-SYSTEMS
INTERNATIONAL LDA
Rua do Polo Sul
Lote 1.01.1.1 - 2B
1990-273 Lisbon, Portugal
Phone +351-21-89 22 890
Fax +351-21-89 22 899
E-mail: dsi.lisboa@dywidag.pt

Spain

DYWIDAG SISTEMAS
CONSTRUCTIVOS, S.A.
Avenida de la Industria, 4
Pol. Ind. La Cantuena
28947 Fuenlabrada (MADRID), Spain
Phone +34-91-642 20 72
Fax +34-91-642 27 10
E-mail: dywidag@dywidag-sistemas.com
www.dywidag-sistemas.com

United Kingdom

DYWIDAG-SYSTEMS
INTERNATIONAL LTD.
Northfield Road
Southam, Warwickshire
CV47 0FG, Great Britain
Phone +44-1926-81 39 80
Fax +44-1926-81 38 17
E-mail: sales@dywidag.co.uk
www.dywidag-systems.com/uk



AUSTRIA
ARGENTINA
AUSTRALIA
BELGIUM
BOSNIA AND HERZEGOVINA
BRAZIL
CANADA
CHILE
COLOMBIA
COSTA RICA
CROATIA
CZECH REPUBLIC
DENMARK
EGYPT
ESTONIA
FINLAND
FRANCE
GERMANY
GREECE
GUATEMALA
HONDURAS
HONG KONG
INDONESIA
ITALY
JAPAN
KOREA
LEBANON
LUXEMBOURG
MALAYSIA
MEXICO
NETHERLANDS
NORWAY
OMAN
PANAMA
PARAGUAY
PERU
POLAND
PORTUGAL
QATAR
SAUDI ARABIA
SINGAPORE
SOUTH AFRICA
SPAIN
SWEDEN
SWITZERLAND
TAIWAN
THAILAND
TURKEY
UNITED ARAB EMIRATES
UNITED KINGDOM
URUGUAY
USA
VENEZUELA

www.dsi-tunneling.com
www.alwag.com