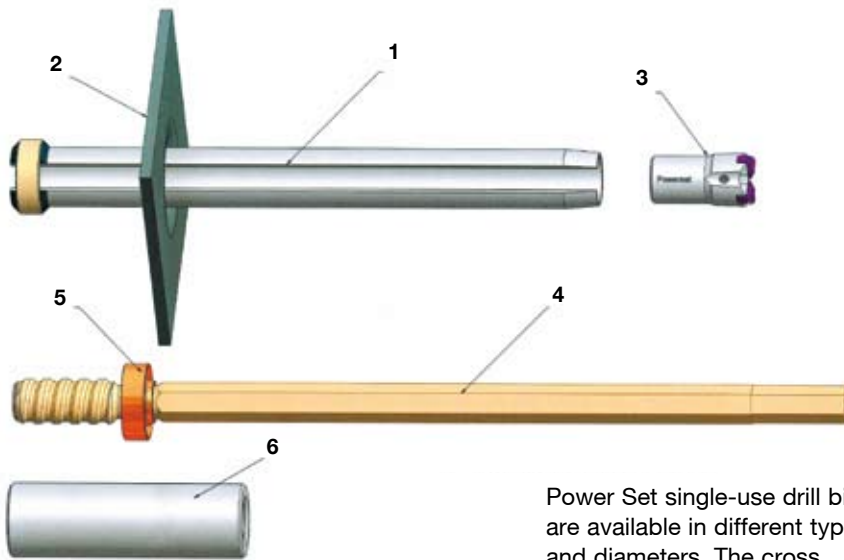


**AT – Power Set  
Self-drilling Friction Bolt**



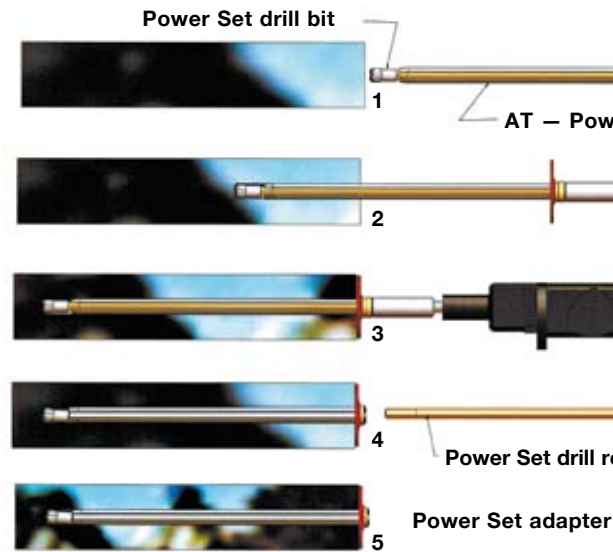
## System Components



- 1 AT – Power Set Self-drilling Friction Bolt
- 2 Bolt plate
- 3 Power Set drill bit
- 4 Power Set drill rod
- 5 Power Set impact ring
- 6 Power Set adapter

Power Set single-use drill bits are available in different types and diameters. The cross or button bits with carbide inserts are tuned to the actual requirements and rock mass conditions.

## Installation in 5 steps



### Field of application

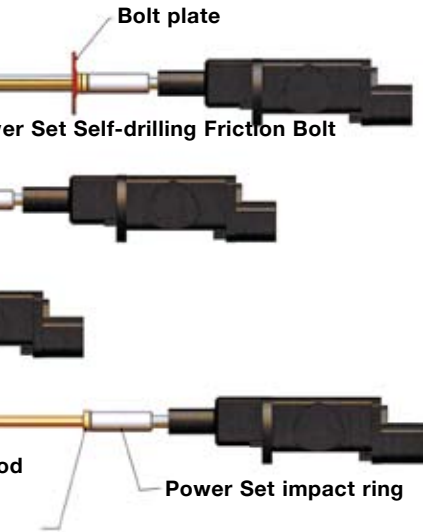
Main applications of AT – Power Set Self-drilling Friction Bolts are:

- **Tunneling and Mining**
  - Rock bolting
  - Face anchoring
- **Rock fall and rock slide protection**
  - Anchorage of avalanche barriers
  - Instant protection in case of rock fall hazard

## Specifications 1)

#	Parameter	Unit	Type 1	Type 2
1	Steel tube diameter x wall thickness	[mm]	50 x 3,75	50 x 5,0
2	Cross-section	[mm <sup>2</sup> ]	469	599
3	Characteristic max. tensile load	[kN]	330	300
4	Guiding value shear force (in-situ)	[kN]	370 - 470	360 - 420
5	Delivery lengths	[m]	1,0 - 4,0	

1) Accredited by the Austrian Federal Ministry of Transport, Innovation and Technology, Vienna, file no.: BMVIT-327.120/0025-II/ST2-2005, date: 2005-04-27



### Prime advantages of the AT – Power Set Self-drilling Friction Bolt

- Simultaneous drilling and installation
- Installation using standard drilling machines
- Immediate load-bearing capacity after installation
- Direct load transfer over the entire bolt length
- Ability to maintain the load-bearing capacity even when undergoing large deformations
- High shear resistance (shear strength > tensile strength)
- Non-sensitive to vibrations and blasting operations
- Secure, easy and time-optimized installation procedure
- Assured bolt installation even in case of unstable boreholes
- No injection or grouting necessary
- Ergonomic and safety-related advantages for the workforce



**Austria**  
 DYWIDAG-SYSTEMS  
 INTERNATIONAL GMBH  
 Wagram 49  
 4061 Pasching/Linz, Austria  
 Phone +43-7229-61 04 90  
 Fax +43-7229-61 04 980  
 E-mail: alwag@dywidag-systems.com  
 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-Artéon  
 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-systems.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

**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: lsi.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  
 @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

**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.



- 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](http://www.dsi-tunneling.com)  
[www.alwag.com](http://www.alwag.com)