# STA-LOK TIE ROD / TIE BAR SYSTEMS



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Sta-Lok specialise in the design, manufacture and supply of stainless steel tie rod / tie bar systems, providing complete solutions for Architects, Engineers and Contractors.

Sta-Lok tie rod specification provides the ultimate in design and functionality meeting the demands of modern architectural design.

All tie rod systems are manufactured at our facility in Essex, England, to the highest standards.

Our quality system ensures that each component is 100% inspected and conforms to the client's specifications.

Sta-Lok Tie rod systems have been used in projects throughout the world, including Glass façade, Fabric Canopy and Structural bracing.

With 40 years experience, Sta-Lok has developed a comprehensive range of Fork ends, Spade ends, RTP ends and Centre Discs to suit most applications.

For projects that require unique features, systems can be designed and manufactured to meet the client's individual requirements.

These items are manufactured to order.

Our technical specialists are available to assist with design details and product selection, please contact us for further information.

Call +44 (0)1206 391509 email sales@stalok.com

### **S A - L O K TIE RODS / TIE BARS**

Material specification to EN 10088.

Tie rods are manufactured from high strength Stainless steel 316 (1.4404) or Duplex 2205 (1.4462).

System lengths up to 6 metres are available, rod connectors can be used to achieve longer spans.

#### Adjustment

Tie rods and fittings are threaded left hand one end and right hand the other. +/- adjustment is achieved by rotation of the rod in a clockwise/counter clockwise direction.

#### **Ready to Install**

Tie rod systems are supplied ready to install. Fork ends are pre-assembled and adjusted to customers requirements.

#### **End fitting options**

Fork ends Spade ends RTP ends Centre Discs



#### **Mechanical Properties:**

M6 – M16 Bars M20 – M36 Bars

0.2% Proof strength 500 N/mm2 0.2% Proof strength 460 N/mm2 Tensile strength 700 N/mm2 Tensile strength 640 N/mm2





240 Grit

Self Colour

Bar diameter		M6	M8	M10	M12	M16	M20	M22	M24	M27	M30	M36
Yield Load	Kn	8.9	16.4	26.1	38.1	72.1	103.6	129.5	149.2	196.4	238.7	349.2
Breaking Load	Kn	12.5	23.0	36.6	53.4	100.9	144.0	180.1	207.5	273.3	332.1	485.8

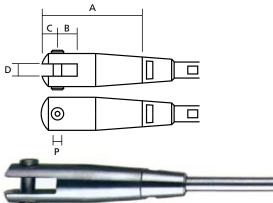
#### STA-LOK **F34 FORK TO FORK SYSTEM**

A fully machined tie rod fork, with sleek geometry and a wide range of adjustment, developed to meet the requirements of modern Architectural design.

System lengths up to 6 metres are available, rod connectors can be used to achieve longer spans.

#### Adjustment

Tie rods and fittings are threaded left hand one end and right hand the other. +/- adjustment is achieved by rotation of the rod in a clockwise/counter clockwise direction.



#### Locking

Conical locking nuts have been designed to cover Tie bar threads at mid adjustment. Providing a clean line between the rod and end fitting.

#### Pins

Double headed pins including pin head and locking screw are supplied as standard.

Isolating between different materials, can be achieved by using isolation washers and sleeves.







#### **Ready to Install**

Tie rod systems are supplied ready to install. Fork ends are pre-assembled and adjusted to customers pin / pin requirements.



FINISH OPTIONS



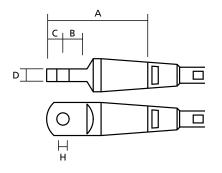
240 Grit

Thread		M6	M8	M10	M12	M16	M20	M22	M24	M27	M30	M36
Yield Load	Kn	8.9	16.4	26.1	38.1	72.1	103.6	129.5	149.2	196.4	238.7	349.2
Breaking Load	Kn	12.5	23.0	36.6	53.4	100.9	144.0	180.1	207.5	273.3	332.1	485.8
+ / - Adjustment		28	40	48	48	60	74	78	88	94	111	116
А		57	78	104	115	140	166	184	205	228	264	279
В		10	14	22	27	30	40	45	50	50	60	60
С		8.5	10.3	16	19	23	26	32	35	41	44	50
D		6.4	8	11	12.7	16	19	22	25	28	31	35
Р		6.3	8	11	12.7	16	18.5	21.5	25	28	30	34

### **F33 SPADE TO SPADE SYSTEM**

A fully machined tie rod spade, with sleek geometry, developed to meet the requirements of modern Architectural design.

System lengths up to 6 metres are available, rod connectors can be used to achieve longer spans.



#### Adjustment

Tie rods and fittings are threaded left hand one end and right hand the other. +/- adjustment is achieved by rotation of the rod in a clockwise/counter clockwise direction.

#### Locking

Conical locking nuts provide a clean line between the rod and end fitting.

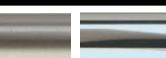
#### **Ready to Install**

Tie rod systems are supplied ready to install. Spade ends are pre-assembled and adjusted to customers hole centre requirements.



#### **FINISH OPTIONS**





Polish

240 Grit

M6 M8 M10 M12 M16 M20 M22 M24 M27 M30 M36 Thread Yield Load Kn 8.9 16.4 26.1 38.1 72.1 103.6 129.5 149.2 196.4 238.7 349.2 Breaking Load Kn 12.5 23.0 36.6 53.4 100.9 144.0 180.1 207.5 273.3 332.1 485.8 15 15 15 15 20 20 20 25 + / - Adjustment 15 15 25 47 57 74 А 85 104 126 143 164 170 191 230 В 10 14 20 25 30 40 45 50 50 55 70 С 9 11 16 20 26 30 32 40 41 51 60 D 6 8 11 12 16 19 22 25 28 30 35 6 8 Н 11 12.7 16 19 21.5 25 28 30 34

## **STA-LOK** RTP SYSTEM

Designed for application in Glass facades, providing tension and support between steel members.

Fully machined with sleek geometry, developed to meet the requirements of modern Architectural design.

System lengths up to 6 metres are available, rod connectors can be used to achieve longer spans.

Α

В

#### Adjustment

Tie rods and fittings are threaded left hand one end and right hand the other. +/- adjustment is achieved by rotation of the rod in a clockwise/counter clockwise direction.

#### Locking

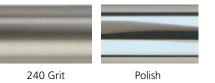
Conical locking nuts provide a clean line between the rod and end fitting.

#### **Ready to Install**

Tie rod systems are supplied ready to install. RTP ends are pre-assembled and adjusted to customers end to end requirements.



#### FINISH OPTIONS



Thread		M6	M8	M10	M12	M16	M20	M22	M24	M27	M30	M36
Yield Load	Kn	8.9	16.4	26.1	38.1	72.1	103.6	129.5	149.2	196.4	238.7	349.2
Breaking Load	Kn	12.5	23.0	36.6	53.4	100.9	144.0	180.1	207.5	273.3	332.1	485.8
+ / - Adjustment		15	15	15	15	15	15	20	20	20	25	25
А		45	51	61	63	75	89	105	119	125	140	161
В		14	17	25	32	38	44	50	57	63	69	82

### **STA-LOK** HD CENTRE DISCS

Designed to BS 5950 - 1:2000.

Material Specification to EN 10088.

Fully machined centre discs have been designed to fit F34 tie rod fork ends.

Discs are available with 3 and 4 holes.

#### Adjustment

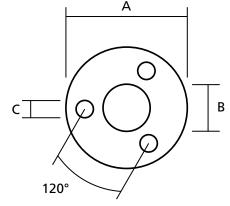
Tie rods and fittings are threaded left hand one end and right hand the other. +/- adjustment is achieved by rotation of the rod in a clockwise/counter clockwise direction.

#### **Hole Position**

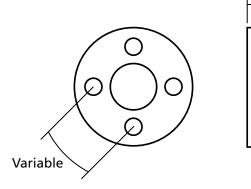
3 hole discs are manufactured with 120 degree angle between hole centres.

4 hole discs are manufactured to clients specification.

D



HD3



HD4



Bar Diameter	M6	M8	M10	M12	M16	M20	M22	M24	M27	M30	M36
A	70	80	120	140	180	200	230	260	300	350	350
В	20	20	40	40	50	55	60	70	70	90	90
С	6.3	8	11	12.7	16	19	22	25	28	30	34
D	5.5	7	10	11	15	18	21	24	27	29	34

# STA-LOK

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