



# SAS 500

*Reinforcing thread bar coupling system*

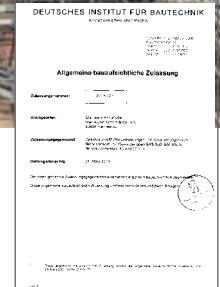


**SAS SYSTEMS**

# Advantages of the world wide used SAS 500 - Reinforcing thread bar coupling system

- ▶ screwable thread ribs along full length of the bar
- ▶ robust, site-proven self-cleaning thread
- ▶ cutting or extension possible at any position of the bar
- ▶ mechanical thread bar splicing up to 100 % allowed in one section
- ▶ thread bar diameter 12 mm - 50 mm with approval in several European countries
- ▶ user-friendly integration into the construction and reinforcing program 
- ▶ galvanized or epoxy coated bars as well as accessories are available


**Approval thread bar**  
 Z-1.1-58 Ø 12 - 32 mm  
 Z-1.1-106 Ø 40 + 50 mm  
**Approval accessories**  
 Z-1.5-174 Ø 12 - 32 mm  
 Z-1.5-173 Ø 40 + 50 mm



- ▶ SAS 500 – Reinforcing thread bar coupling system replaces many other bar connection systems
- ▶ individual customized bar lengths available
- ▶ a simple and low cost solution



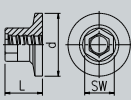
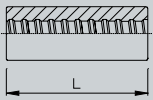

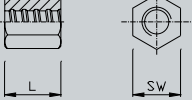
## thread bars

yield stress / ultimate stress areas of application	nom.-Ø	yield load	ultimate load	cross section area	weight	elongation		
[N/mm <sup>2</sup> ]	[mm]	[kN]	[kN]	[mm <sup>2</sup> ]	[m/to]	Ag <sub>t</sub> [%]	A <sub>10</sub> [%]	
<b>SAS 500 (BSt 500 S) / grade 75</b>								
 <b>B 500 / 550</b> reinforcing systems	12	57	62	113	1123,6	0,89		
	14	77	85	154	826,4	1,21		
	16	100	110	201	632,9	1,58		
	20	160	175	314	404,9	2,47		
	25	245	270	491	259,7	3,85	6	10
	28	310	340	616	207,0	4,83		
	32	405	440	804	158,5	6,31		
	40	630	690	1260	101,3	9,87		
	50	980	1080	1960	64,9	15,40		

approval by  
DIBt



## standard accessories for thread bar systems

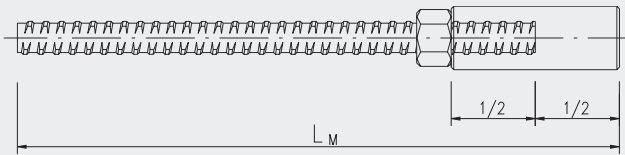
				
	anchor piece	coupler, standard	hexagonal coupler, long	lock nut, long
<b>SAS 500 (BSt 500 S) / grade 75</b>				
Ø [mm]	T 2073 - Ø SW x L x d [mm]	T 3003 - Ø d x L [mm]	T 3010 - Ø SW x L [mm]	T 2003 - Ø SW x L [mm]
12	-	22 x 60	22 x 80	19 x 20
14	30 x 33 x 50	27 x 75	27 x 100	27 x 25
16	30 x 33 x 50	32 x 90	32 x 120	32 x 30
20	36 x 40 x 65	36 x 105	32 x 140	32 x 40
25	41 x 45 x 70	40 x 115	41 x 160	41 x 40
28	46 x 50 x 90	45 x 125	41 x 180	41 x 45
32	50 x 60 x 100	52 x 140	50 x 180	50 x 50
40	65 x 70 x 120	65 x 160	65 x 210	60 x 65
50	80 x 85 x 150	80 x 200	80 x 240	80 x 80

further **accessories** are mentioned in our catalogue.

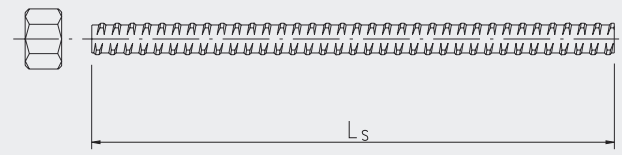


# SAS 500 thread bar reinforcement coupling

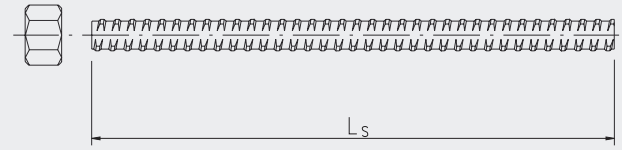
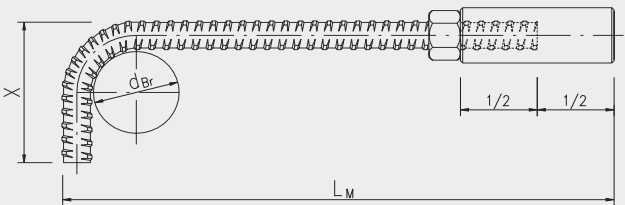
coupling bar / type HMS



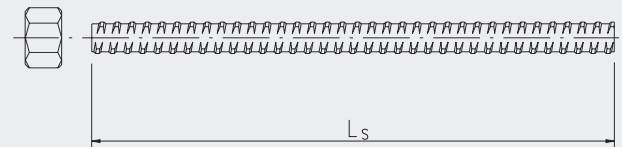
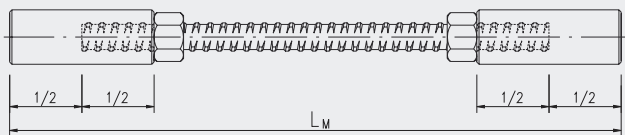
connecting bar / type AS



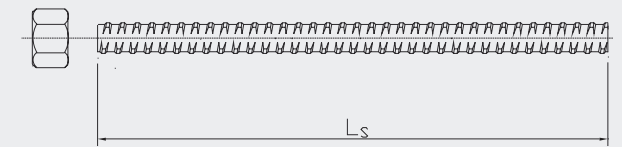
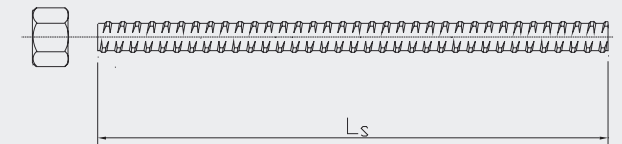
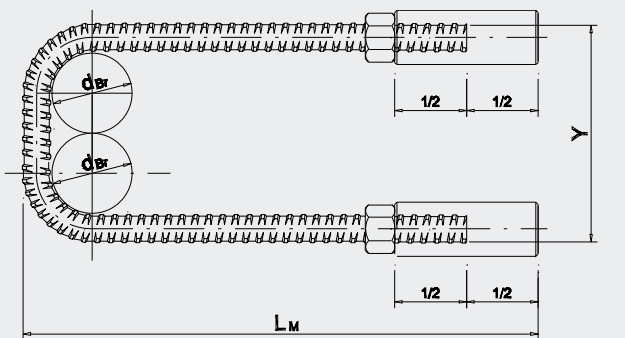
hook extension bar / type HMSG



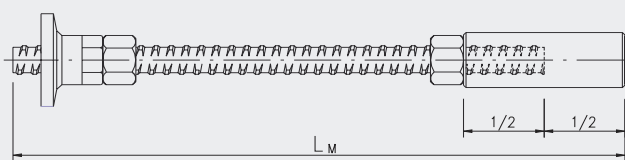
fitting bar / type DMS



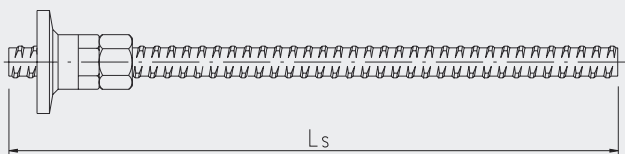
loop bar / type HMSS



end anchorage bar / type EVS



end anchorage bar / type EVV



### legend

$L_M$  = length coupling bar incl. 1/2 coupler-length

$L_S$  = length connecting bar

X = leg length

Y = outside measure of loop

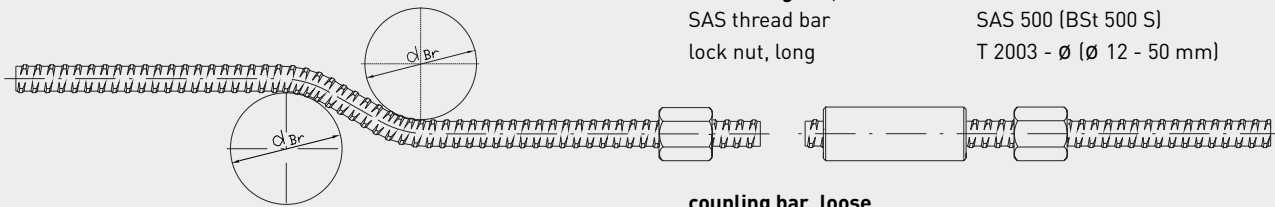
$d_{Br}$  = bending roll diameter

- ▶ all measures are outside measures
- ▶ lock nut for connection bars will be delivered loose



## SAS 500 thread bar reinforcement coupling

### tapered column



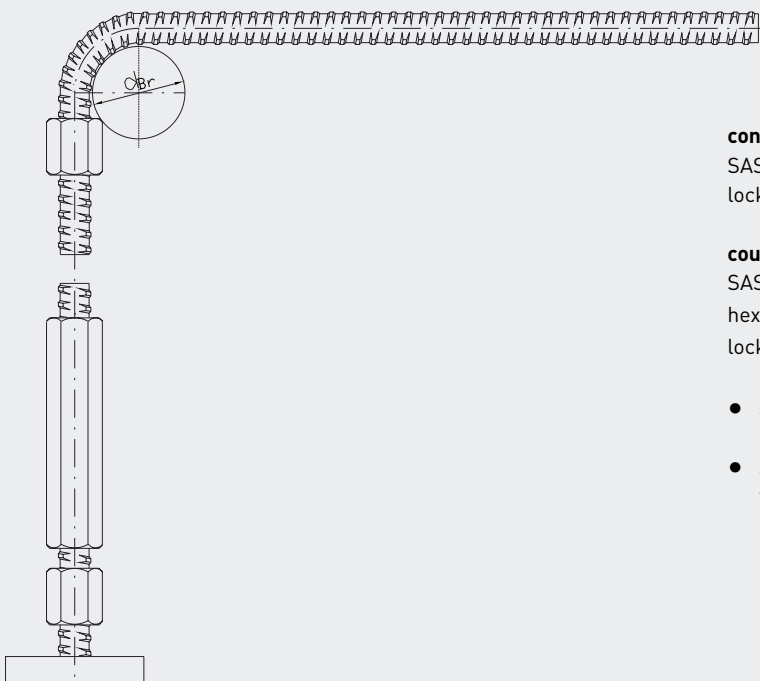
#### connecting bar, bent

SAS thread bar	SAS 500 (BSt 500 S)
lock nut, long	T 2003 - $\emptyset$ ( $\emptyset$ 12 - 50 mm)

#### coupling bar, loose

SAS thread bar	SAS 500 (BSt 500 S)
coupler, standard or	T 3003 - $\emptyset$ ( $\emptyset$ 12 - 50 mm)
hexagonal coupler, long	T 3010 - $\emptyset$ ( $\emptyset$ 12 - 50 mm)
lock nut, long	T 2003 - $\emptyset$ ( $\emptyset$ 12 - 50 mm)

### connection beam, roof, frame corner



#### connecting bar, bent, not rotateable

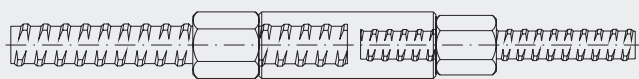
SAS thread bar	SAS 500 (BSt 500 S)
lock nut, long	T 2003 - $\emptyset$ ( $\emptyset$ 12 - 50 mm)

#### coupling bar, loose

SAS thread bar	SAS 500 (BSt 500 S)
hexagonal coupler, long	T 3010 - $\emptyset$ ( $\emptyset$ 12 - 50 mm)
lock nut, long	T 2003 - $\emptyset$ ( $\emptyset$ 12 - 50 mm)

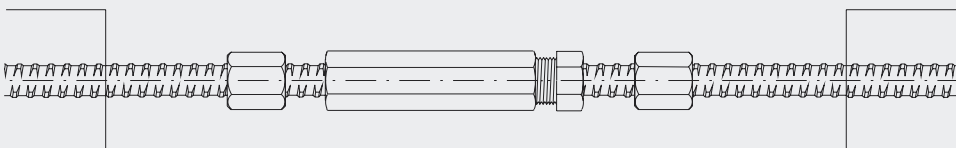
- simple and low cost solution
- since coupler can be fully threaded onto one side of the bar before connecting, no special arrangement has to be taken at short bended connection bars

### reducing transition connection



SAS thread bar	SAS 500 (BSt 500 S)
reducing coupler	T 3102 - $\emptyset$ ( $\emptyset$ 16 - 50 mm)
lock nut, long	T 2003 - $\emptyset$ ( $\emptyset$ 16 - 50 mm)

### turnbuckle (between two fixed bars)



SAS thread bar	SAS 500 (BSt 500 S)
turnbuckle	T 3105 - $\emptyset$ ( $\emptyset$ 16 - 50 mm)
lock nut, long	T 2003 - $\emptyset$ ( $\emptyset$ 16 - 50 mm)