



SAH
Stahlwerk Annahütte

SAS Shebolt System

SAS Shebolt System

SAS SYSTEMS



MAX AICHER

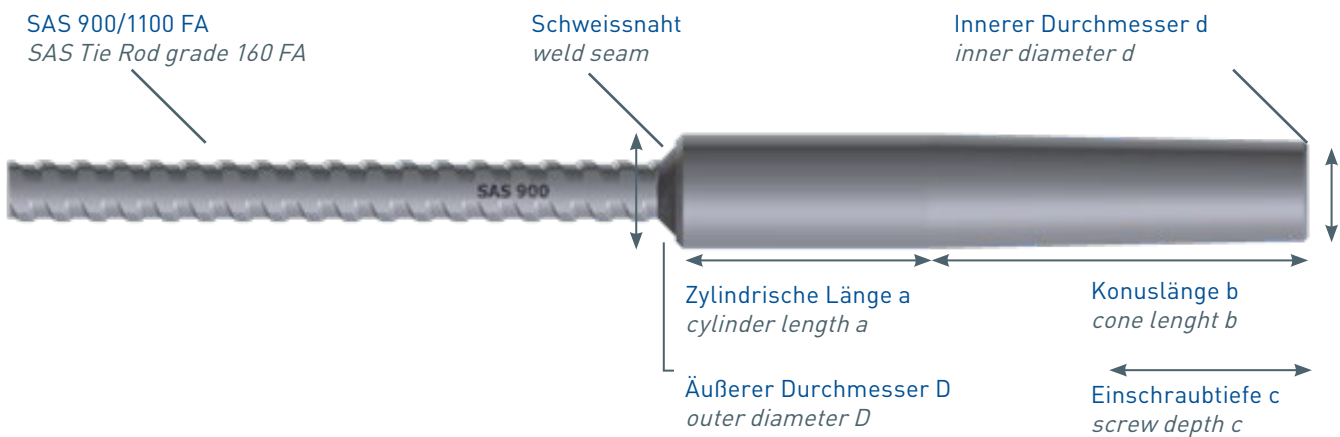
Technischer Fortschritt - SAS Shebolt

Advanced technology - SAS Shebolt



Aufbau und Abmessungen des SAS Shebolt

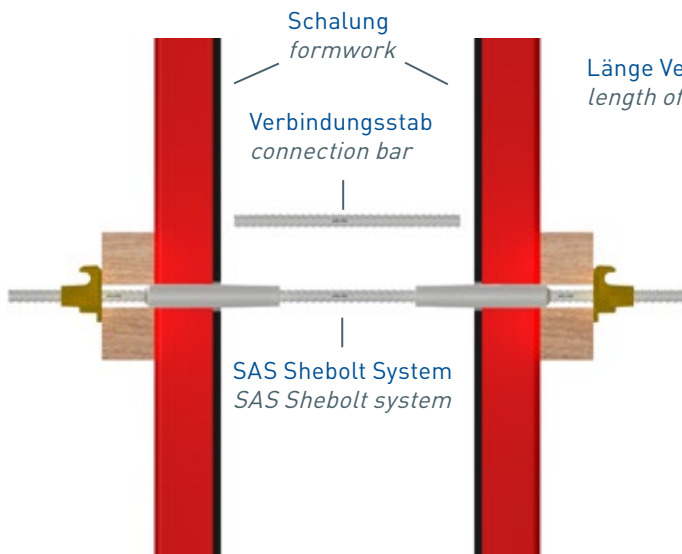
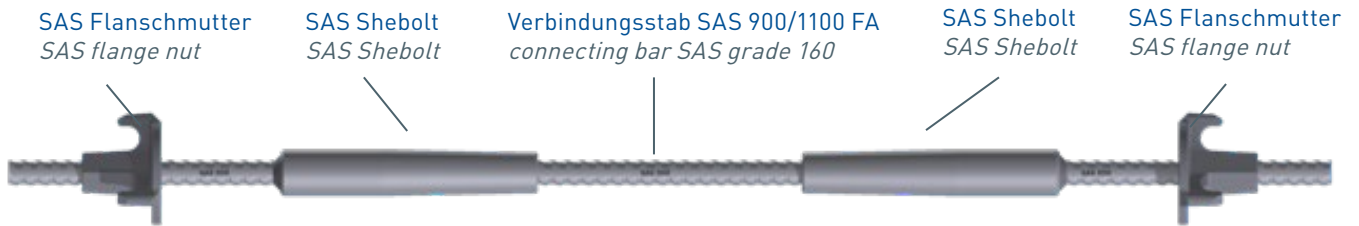
Design and dimensions of SAS Shebolt



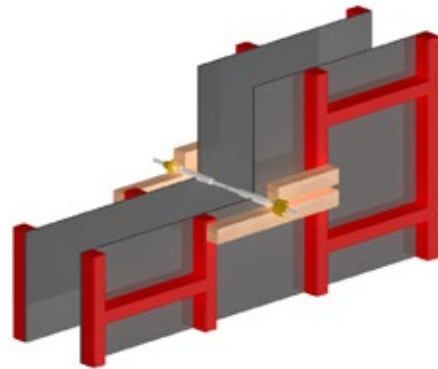
| SAS Shebolt | Stabdurchmesser / Bar size | Standardlänge / standard length | Standardgewicht / standard weight | Arbeitslast / working load | Bruchlast / ultimate load | Zylindrische Länge / cylinder length | Konuslänge / cone length | Einschraubtiefe / screw depth | Innerer Durchmesser / inner diameter | Äußerer Durchmesser / outer diameter |
|----------------|----------------------------|---------------------------------|-----------------------------------|----------------------------|---------------------------|--------------------------------------|--------------------------|-------------------------------|--------------------------------------|--------------------------------------|
| | [mm] | [mm] | [kg] | [kN] | [kN] | a | b | c | d | D |
| 15 FA 30 460 G | 15 | 460 | 1,29 | 90 | 170 | 75 | 100 | 60 | 27 | 32 |
| 20 FA 30 500 G | 20 | 500 | 2,20 | 160 | 320 | 108 | 112 | 60 | 32 | 38 |
| | ["] | ["] | [lbs] | [kips] | [kips] | ["] | ["] | ["] | ["] | ["] |
| 15 FA 30 460 G | 5/8 | 18 | 2.84 | 20 | 38 | 3 | 3 7/8 | 2 2/3 | 1 | 1 1/4 |
| 20 FA 30 500 G | 7/8 | 20 | 4.85 | 36 | 72 | 4 1/4 | 4 3/8 | 2 3/8 | 1 1/4 | 1 1/2 |

SAS Shebolt System: eingebaut im Schalungssystem

SAS Shebolt system: installed into formwork system



Länge Verbindungsstab = Wandstärke - 2x Betondeckung
length of connecting bar = wall thickness - 2x concrete cover



Eigenschaften SAS Shebolt System

Characteristics of the SAS Shebolt System

- Anschlussstab und Verbindungsstab aus SAS 900/1100 FA kompatibel zu SAS Schalungszubehör.
- Einfache Montage.
- Hohe Wiederverwendbarkeit durch robustes und baustellengerechtes Grobgewinde.
- Die Länge des Anschlussstabes kann nach Kundenwunsch variiert werden.
- Korrosionsschutz durch galvanische Verzinkung.
- Ausbau mittels SAS Spannstabausdreher 10F 71 002G
- Einfaches Ausdrehen aus abgeundenem Beton durch glatte Oberfläche und konische Form
- Kein Plastiküberzug erforderlich
- Connecting bar for SAS 900/1100 FA is fully compatible with SAS formwork accessories.
- Easy installation.
- High reusability due to the robust coarse thread best suited for tough construction site conditions.
- The connecting bars are cut to length according to customer requirements.
- Corrosion protection by means of electrogalvanization.
- Removal by using SAS tie rod removers 10F 710024
- Easily removed from hardened concrete due to its smooth surface and conic shape
- No plastic cover required



SAS Gewindestäbe | SAS thread bar

Streckgrenze / Zugfestigkeit | yield stress / ultimate stress
Anwendungsbereiche | areas of application

Nenn- \varnothing / nom. \varnothing Strecklast / yield load Bruchlast / ultimate load Fläche / cross section area Gewicht / weight Dehnung / elongation


[mm] [kN] [kN] [mm²] [m/to] [kg/m] A_{gt} [%] A₁₀ [%]

SAS 500 / 550 – grade 75


| | | | | | | | | | |
|--|---|------|------|------|------|--------|-------|---|-----|
|  | Bewehrungstechnik reinforcing systems | 12 | 57 | 62 | 113 | 1123,6 | 0,89 | 6 | 10 |
| | | 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 | | |
|  | Geotechnik geotechnical systems | 28 | 310 | 340 | 616 | 207,0 | 4,83 | | |
| | | 32 | 405 | 440 | 804 | 158,5 | 6,31 | | |
| | | 36 | 510 | 560 | 1020 | 125,2 | 7,99 | | |
| | | 40 | 630 | 690 | 1260 | 101,3 | 9,87 | | |
| | | 43 | 726 | 799 | 1452 | 87,7 | 11,40 | | |
| | | 50 | 980 | 1080 | 1960 | 64,9 | 15,40 | | |
| | SAS 555 / 700 – grade 80 | 57,5 | 1441 | 1818 | 2597 | 49,1 | 20,38 | 5 | 10 |
| | SAS 555 / 700 – grade 80 | 63,5 | 1760 | 2215 | 3167 | 40,2 | 24,86 | 5 | --- |
| | SAS 500 / 550 – grade 75 | 75 | 2209 | 2430 | 4418 | 28,8 | 34,68 | 5 | --- |

Alternativ SAS 550 erhältlich | alternative SAS 550 grade 75 available




SAS 450 / 700 – grade 60

| | | | | | | | | | |
|--|------------------|----|-----|-----|-----|-------|------|--|----------------------|
|  | Bergbau mining | 16 | 93 | 145 | 207 | 617,3 | 1,62 | | (A ₃) 15 |
| | | 25 | 220 | 345 | 491 | 259,7 | 3,85 | | (A ₃) 20 |



SAS 650 / 800 – grade 90

| | | | | | | | | | |
|--|------------------|----|-----|-----|-----|-------|------|--|----------------------|
|  | Bergbau mining | 22 | 247 | 304 | 380 | 335,6 | 2,98 | | (A ₃) 18 |
| | | 25 | 319 | 393 | 491 | 259,7 | 3,85 | | |
| | | 28 | 400 | 493 | 616 | 207,0 | 4,83 | | |
| | | 30 | 460 | 565 | 707 | 180,2 | 5,55 | | |


SAS 670 / 800 – grade 97

| | | | | | | | | | | | |
|--|---|------|------|------|------|-------|-------|---|-----|--|-----|
|  | Geotechnik geotechnical systems | 18 | 170 | 204 | 254 | 500,0 | 2,00 | 5 | 10 | | |
| | | 22 | 255 | 304 | 380 | 335,6 | 2,98 | | | | |
| | | 25 | 329 | 393 | 491 | 259,7 | 3,85 | | | | |
| | | 28 | 413 | 493 | 616 | 207,0 | 4,83 | | | | |
|  | Ankerteknik tunneling & mining | 30 | 474 | 565 | 707 | 180,2 | 5,55 | | | | |
| | | 35 | 645 | 770 | 962 | 132,5 | 7,55 | | | | |
| | | 43 | 973 | 1162 | 1452 | 87,7 | 11,40 | | | | |
|  | Hochfeste Bewehrung high-strength reinforcement | 50 | 1315 | 1570 | 1963 | 64,9 | 15,40 | | | | |
| | | 57,5 | 1740 | 2077 | 2597 | 49,1 | 20,38 | | | | --- |
| | | 63,5 | 2122 | 2534 | 3167 | 40,2 | 24,86 | | | | --- |
| | | 75 | 2960 | 3535 | 4418 | 28,8 | 34,68 | | --- | | |


SAS 950 / 1050 – grade 150

| | | | | | | | | | |
|--|--|------|------|------|------|-------|-------|---|---|
|  | Spanntechnik post-tensioning systems | 18 | 230 | 255 | 241 | 510,2 | 1,96 | 5 | 7 |
| | | 26,5 | 525 | 580 | 551 | 223,2 | 4,48 | | |
| | | 32 | 760 | 845 | 804 | 153,1 | 6,53 | | |
|  | Geotechnik geotechnical systems | 36 | 960 | 1070 | 1020 | 120,9 | 8,27 | | |
| | | 40 | 1190 | 1320 | 1257 | 97,9 | 10,21 | | |
| | | 47 | 1650 | 1820 | 1735 | 70,9 | 14,10 | | |


SAS 835 / 1035 – grade 150

| | | | | | | | | | |
|--|-----------------------------------|----|------|------|------|------|-------|---|-----|
|  | Geotechnik geotechnical systems | 57 | 2155 | 2671 | 2581 | 47,7 | 20,95 | 4 | --- |
| | | 65 | 2780 | 3447 | 3331 | 36,9 | 27,10 | | --- |
| | | 75 | 3690 | 4572 | 4418 | 27,9 | 35,90 | | --- |

SAS 900 / 1100 FA – grade 160 FA

| | | | | | | | | | |
|--|----------------------------------|------|-----|-----|-----|-------|------|---|---|
|  | Schalungstechnik formwork ties | 15 | 159 | 195 | 177 | 694,4 | 1,44 | 3 | 7 |
| | | 20 | 283 | 345 | 314 | 390,6 | 2,56 | | |
| | | 26,5 | 495 | 606 | 551 | 223,2 | 4,48 | | |


SAS 900 / 1050 FC – grade 150 FC

| | | | | | | | | | |
|--|----------------------------------|----|-----|-----|-----|-------|------|---|---|
|  | Schalungstechnik formwork ties | 15 | 159 | 186 | 177 | 694,4 | 1,44 | 3 | 7 |
| | | 20 | 283 | 330 | 314 | 390,6 | 2,56 | | |

SAS 950 / 1050 E – grade 150

| | | | | | | | | | |
|--|--|------|-----|-----|-----|-------|------|---|---|
| | | 26,5 | 525 | 580 | 551 | 223,2 | 4,48 | 5 | 7 |
|--|--|------|-----|-----|-----|-------|------|---|---|

SAS 750 / 875 FS – kaltgerollt | cold rolled – grade 120 FS

| | | | | | | | | | |
|--|----------------------------------|------|-----|-----|-------|-------|------|---|-----|
|  | Schalungstechnik formwork ties | 12,5 | 90 | 120 | 132,5 | 961,5 | 1,04 | 2 | 5,5 |
| | | 15 | 142 | 165 | 189 | 675,7 | 1,48 | | |
| | | 20 | 245 | 285 | 326 | 390,6 | 2,56 | | |

Zubehör für alle Abmessungen und Anwendungen lieferbar | accessories for all dimensions and applications available