



Pictured is a CX-ALPHA system including Auto-Torque function. The multi-function display with colored graphical display offers easy-input for all ITH hydraulic torque wrench options. Note: The multi-function remote is usually mounted on the pump frame.

Automatic bolting: ITH Auto-Torque

With optional ITH Auto-Torque you can speed up your bolting procedures and increase your process quality, because every cycle

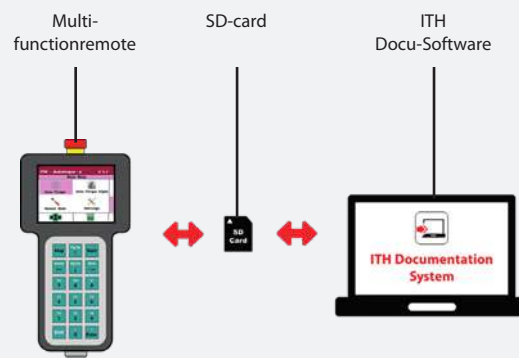
of the process will be performed with same speed, same duration and same force.

- 1. Pre-setting** of the target values torque [Nm or ft · lbs] and tightening angle α (only with optional system ALPHA) via the multifunction display.
- 2. Work safety by „Dead man’s switch“:** The system only works if the user activates the „Dead man’s switch“.
- 3. The required pressure** will be generated automatically and step-by-step by the ITH hydraulic pump.
- 4. Easy control for the user:** When reaching the pre-set target values the system stops automatically and signals „Bolt ready“ by a green lamp on the remote.
- 5. Compatibility**
 - ITH recommends using Auto-Torque function on type CX or type D-Flex hydraulic torque wrench systems.
 - Auto-Torque function is always included when ordering ITH System ALPHA for hydraulic torque wrenches.

Digital documentation system Docu

Optional digital documentation system „Docu“ offers easy application management and a clear recording of the results.

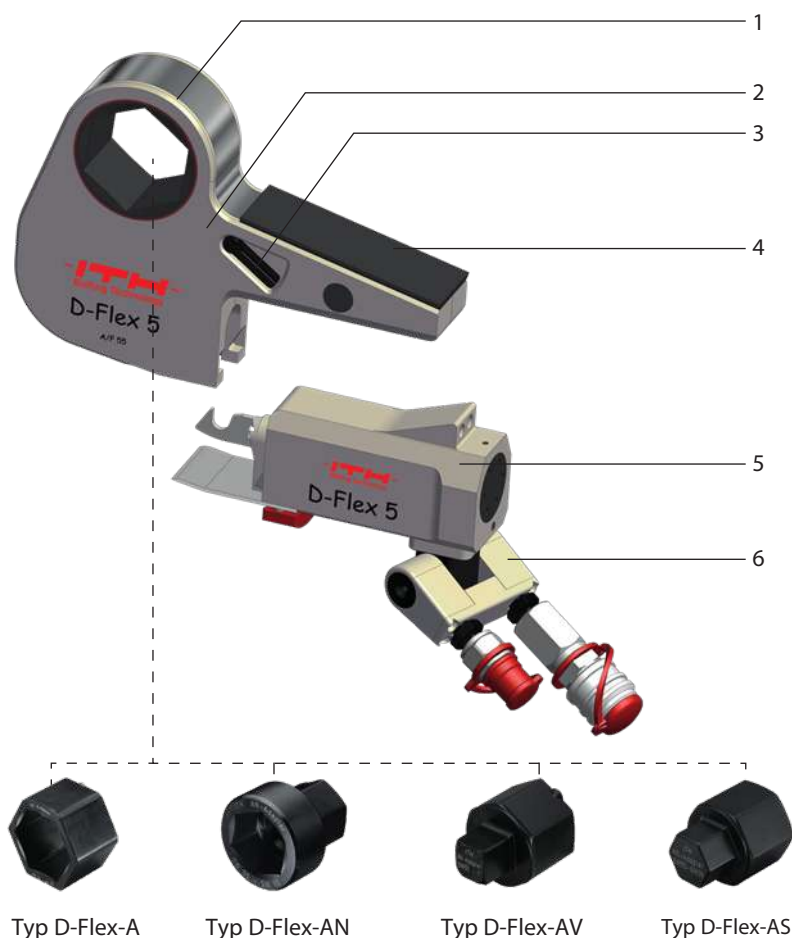
- 1. Configuration of applications and jobs**
Easy set-up of standardized bolting profiles via PC or alternatively via multi-function remote.
- 2. Determination of the parameters**
Setting up hydraulic torque wrench type, target torque values, tightening angles (system ALPHA only) and further relevant parameters.
- 3. Data transfer via SD-card**
Multi-function remote is equipped with a SD-card slot for data transfer.
- 4. Easy documentation of the results**
Bolting process results are transferred to clear designed Excel-sheets or PDF-files on PC.





Low Profile Cassette Type D-Flex

- ✓ Modular system: 1 cylinder unit runs up to 8 cassettes for different bolt diameters A/F
- ✓ Low-profile and extra small head radius – designed to match smallest bolt spacings t.
- ✓ Light-weight modular design with easy access for tool service
- ✓ Fast working dual-hose system
- ✓ Extensive application options by use of inserts and supports
- ✓ Suitable for both service and shop applications
- ✓ Suitable for all ITH Torque Wrench Pumps type DAX



Features

- 1. Smallest head radiuses**
The special ITH design concepts make the cassettes fit into smallest bolt spacings between two bolts. For example the D-FLEX are ready to be used on ASME B16.5 flanges or MSS SP-44 flanges
- 2. Cassette unit**
For several bolt diameters (A/F). Special compact ITH design to fit into smallest bolt pitches between two bolts. The strong housing is made of ultra-light material (UL-material), hardened
- 3. Special TORQUE-FIX feature:**
Holds torque wrench in position – especially useful on overhead applications
- 4. Support**
Several supporting options are available for application specific use
- 5. Cylinder unit**
Ready to run several cassettes
Easy and fast CLICK-AND-GO exchange mechanism: No extra tools needed
- 6. Dual-Hose TWIN-swivel connection**
With two swivel points for maximum flexibility (360° and 270°) when positioning the tool and hoses



On-site ready, robust and flexible: The D-Flex 5 tightens steel beam bolts of a ropeway, powered by a hydraulic pump unit type Hydro-DAX 18.

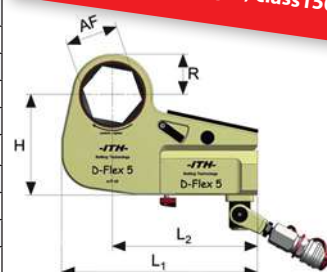


The small head radius makes the D-Flex fit into smallest bolt spacings between two bolts (like on this MSS SP-44 steel flange class 600 model).

Technical data Cassette unit: head radiuses

A/F	D-Flex 2	D-Flex 5	D-Flex 8	D-Flex 12	D-Flex 18	D-Flex 28	D-Flex 40	ITH order no.* cassette
Head radius R [mm]								
19	28							58.00002-3019
22	28							58.00002-3022
24	28							58.00002-3024
27	28	36						58.000xx-3027
30	28	36						58.000xx-3030
32	28	36						58.000xx-3032
36	28	38	46					58.000xx-3036
41	32	38	46					58.000xx-3041
46	35	38	46	48				58.000xx-3046
50	42	42	46	48	58			58.000xx-3050
55	42	42	46	48	58			58.000xx-3055
60	44	46	51	52	58			58.000xx-3060
65	48	48	51	52	58			58.000xx-3065
70		56	57	57	61			58.000xx-3070
75		56	57	57	61			58.000xx-3075
80		62	63	63	66	69		58.000xx-3080
85			63	63	66	69		58.000xx-3085
90			70	70	72	72	80	58.000xx-3090
95			70	70	72	72	80	58.000xx-3095
100				77	78	79	87	58.000xx-3100
105				77	78	79	87	58.000xx-3105
110					87	89	92	58.000xx-3110
115					87	89	92	58.000xx-3115
120**						94	97	58.000xx-3120
125						94	97	58.000xx-3125
130**						100	102	58.000xx-3130
135						100	102	58.000xx-3135
140**						105	107	58.000xx-3140
145						105	107	58.000xx-3145
150**							115	58.00040-3150
155							115	58.00040-3155
160**							122	58.00040-3160
165							122	58.00040-3165
170**							128	58.00040-3170
175							128	58.00040-3175
180							133	58.00040-3180
185							136	58.00040-3185
190							136	58.00040-3190
195							141	58.00040-3195
200							141	58.00040-3200

Extra small head radiuses
 matches flange standards
 ASME B16.5 -
 Pipe Flanges, class 300 to 2500
 MSS SP-44 -
 Steel Pipe Line Flanges, class 150 to 900



B



One cylinder unit runs several cassettes for different bolt dimensions (A/F)

*Order number key: xx = Size cylinder unit. Example D-Flex 8: xx = 08

** Marked A/F: Adapters can be used

Feel free to contact us for customized designs or imperial dimensions. Technical enhancements or modifications reserved.

Cylinder unit: Technical data

ITH type	A/F (available cassettes)	Torque range min. to max.		Length L1		Length L2		Width B		Height H		ITH order no.cylinder unit
	[mm]	[Nm]	[ft-lb]	[mm]	[']	[mm]	[']	[mm]	[']	[mm]	[']	
D-Flex 2	36/46	280 - 2,000	207 - 1,475	184.5/184	7.26/7.24	134.5/137.5	5.30/5.41	34	1.34	88.7	3.49	58.00002-2000
D-Flex 5	41/46/50/55	700 - 5,000	516 - 3,688	238	9.37	174	6.85	42	1.65	124	4.88	58.00005-2000
	60			241	9.49	180	7.09	42	1.65	124	4.88	
	65			243	9.57	180	7.09	42	1.65	124	4.88	
	70			245	9.65	182	7.17	42	1.65	124	4.88	
D-Flex 8	65/75	1,120 - 8,000	826 - 5,900	255/257	10.04/10.12	182/190	7.17/7.48	48	1.89	141	5.55	58.00008-2000
D-Flex 12	85	1,680 - 12,000	1,239 - 8,851	288	11.34	210	8.27	56	2.20	158	6.22	58.00012-2000
D-Flex 18	105	2,520 - 18,000	1,859 - 13,276	369	14.53	263	10.35	68	2.68	196	7.72	58.00018-2000
D-Flex 28	95 - 155	3,750 - 28,000	2,766 - 18,439	419	16.5	315	12.40	77	3.03	215	8.46	58.00028-2000
D-Flex 40	95 - 180	6,000 - 40,000	4,425 - 29,502	521	20.5	400	15.75	94	3.70	240	9.45	58.00040-2000

For Individual designs feel free to contact us. Technical enhancements or modifications reserved.