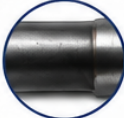
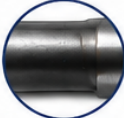
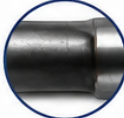
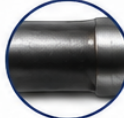
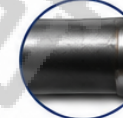
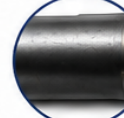


API 5DP DRILL PIPE SIZES COMPARISON



NOMINAL SIZE	2-3/8"	2-7/8"	3-1/2"	4"	4-1/2"	5"	5-1/2"	6-5/8"
RELATIVE OD								
PIPE BODY STRUCTURE								

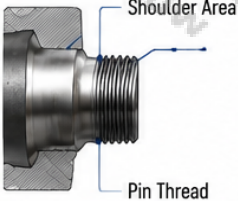
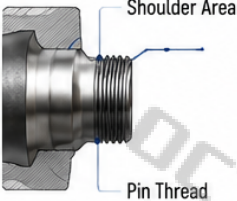
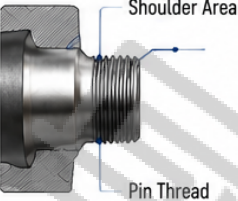
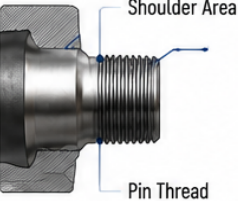
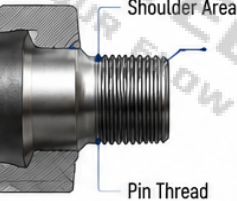
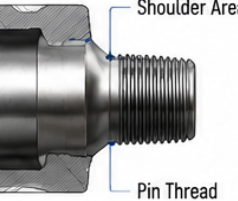
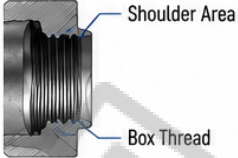
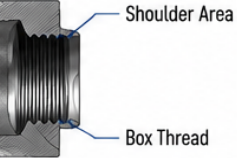
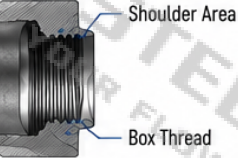
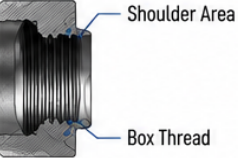
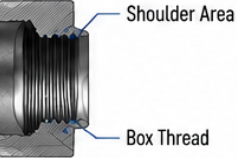
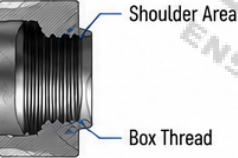
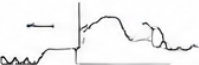


Drill pipes are manufactured in a range of outside diameters to meet different drilling conditions. Larger diameters provide greater strength and torque capacity, while smaller diameters offer improved handling and flexibility.

API 5DP DRILL PIPE GRADE COMPARISON

	E75	X95	G105	S135
				
 STRENGTH LEVEL CATEGORY	 STANDARD STRENGTH Lower strength level Suitable for shallow wells and light duty drilling.	 HIGH STRENGTH Higher strength than E75 Suitable for medium depth and general drilling.	 ULTRA HIGH STRENGTH Higher strength than X95 Suitable for deep wells and demanding conditions.	 PREMIUM STRENGTH Highest strength level Suitable for deep and extreme drilling conditions.
 RELATIVE STRENGTH LEVEL	★☆☆☆☆	★★☆☆☆	★★★☆☆	★★★★☆
 TYPICAL DRILLING CONDITION	 SHALLOW WELLS Lower depth and pressure Low to moderate loads	 MEDIUM DEPTH WELLS Moderate depth and pressure Moderate loads and torque	 DEEP WELLS High depth and pressure High loads and torque	 ULTRA DEEP WELLS Ultra high depth and pressure Extreme loads and torque
 APPLICATION CHARACTERISTICS	• Light to moderate drilling • Standard operating conditions • Cost-effective solution	• General purpose drilling • Balanced performance • Widely used grade	• Heavy duty drilling • High strength requirement • Better fatigue performance	• Extreme drilling conditions • Maximum strength and torque • Premium performance

DRILL PIPE CONNECTION TYPE REFERENCE

NC26	NC31	NC38	NC40	NC50	FH
PIN CONNECTION 	PIN CONNECTION 	PIN CONNECTION 	PIN CONNECTION 	PIN CONNECTION 	PIN CONNECTION 
BOX CONNECTION 	BOX CONNECTION 	BOX CONNECTION 	BOX CONNECTION 	BOX CONNECTION 	BOX CONNECTION 
CONNECTION PROFILE 	CONNECTION PROFILE 	CONNECTION PROFILE 	CONNECTION PROFILE 	CONNECTION PROFILE 	CONNECTION PROFILE 



PIN THREAD

External thread on the tool joint pin.
Connects to the box thread.



SHOULDER AREA

Provides axial support and transfers
tension between pin and box.



BOX THREAD

Internal thread in the tool joint box.
Engages with the pin thread.



CONNECTION PROFILE

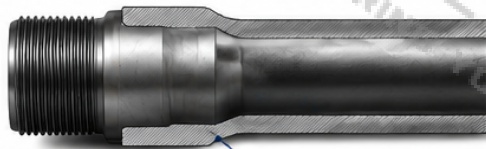
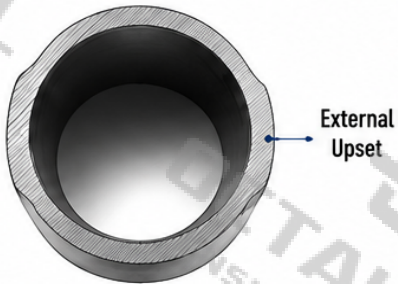
The geometric form of the connection
determines strength and performance.

- All connections are designed to API 5DP requirements.
- Connection type selection affects torque capacity, tensile strength and fatigue performance.
- Proper make-up and inspection are essential for reliable drilling operations.

DRILL PIPE UPSET TYPE COMPARISON

EU

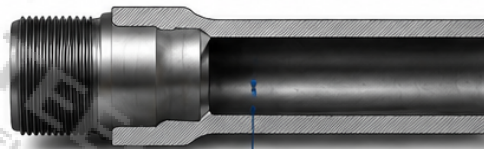
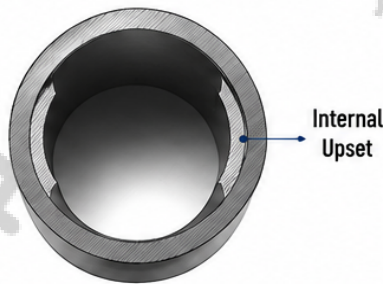
EXTERNAL UPSET
External Reinforcement Only



Material is added to the outside of the pipe end to increase strength and resist collapse.

IU

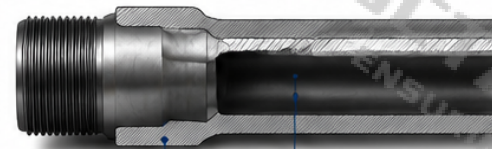
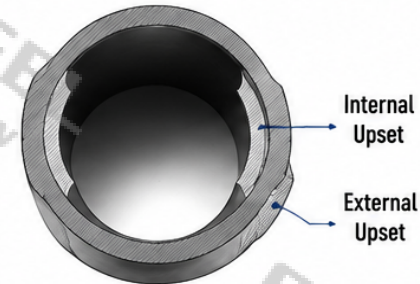
INTERNAL UPSET
Internal Reinforcement Only



Material is added to the inside of the pipe end to improve fatigue strength.

IEU

INTERNAL & EXTERNAL UPSET
Internal and External Reinforcement



Material is added to both the inside and outside of the pipe end for maximum strength.



EXTERNAL REINFORCEMENT
Improves collapse resistance and external durability.



INTERNAL REINFORCEMENT
Enhances fatigue strength and internal pressure integrity.



INTERNAL & EXTERNAL REINFORCEMENT
Provides the best combination of strength, torque capacity and fatigue life.



UPSET SECTION
The reinforced area at the pipe end.