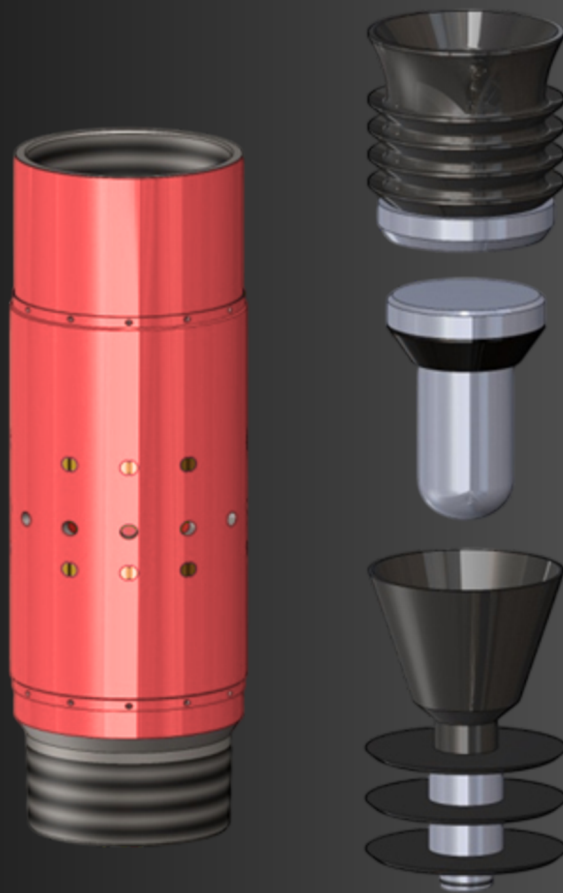


Stage Cementing Collar (Mechanical)

AZM Mechanical Stage collar allows cementing of casing string in two stages.

These collar set the standard for reliability, cost effectiveness, and ease of use with outstanding built-in features and quality. They are the collars of choice when drilling requirements call for proven technology and low risk.

The compact, simple design minimizes the number of moving parts and makes the tools easier to handle.



The collar's clear opening and closing indications at the surface accommodate the hydraulic conditions of the well for safer, more efficient operations. The internal sleeves increase reliability and prevent premature opening from formation restrictions on applied pressures.

It reduces total pumping pressure in long casing strings.

Stage Cementing Collar (Mechanical)

Casing Size	Max Diameter	Weight	Drill out I.D	Overall Length	Closing		Opening pressure/ Free Fall Device (P.S.I)
					Pressure PSI	Force LBS	
5"	6.125	15-18	4.400	29" (approx)	1500	25,000	1100
7"	8.275	26-29	6.200	31" (approx)	1500	57,000	1000
9 5/8"	11.125	43.5-53.5	8.600	32" (approx)	1500	111,000	1000
13 3/8"	15.000	61-72	12.375	33" (approx)	1500	19500	900