D46KSL for car shredder

Client(s) and Country	Vitkovice Heavy Machinery, one of the biggest industrial Companies in Czeck Republic, The machine will be commissioned within the first quarter of 2021. This job is particularly interesting for several reasons. Because of the huge torque to be transmitted, we released the biggest variable speed fluid coupling in our range ever produced, introducing the D46KSL. Vitkovice Heavy Machinery
End User and Country	Cars recycling plant - Czek Republic
Location	Large metal shredder located in Vysoké Myto
Application	The duty of the fluid coupling, besides starting and driving the metal shredder, is hydrodynamic braking of the driven machine. This is obtained by stopping the FC input side with two traditional negative brakes, and filling the KSL circuit to gradually brake the shredder from full speed to 200rpm. Below this speed the hydrodynamic effect is very limited, so a negative brake applied to FC output will complete the braking process to zero rpm. The goal is to stop the shredder within 5 minutes. ▪ DRIVEN MACHINE: METAL SHREDDER ▪ DUTY: START UP AND HYDRODYNAMIC BRAKING

	▪ E.M. RATING: 1030kW@600rpm ▪ ABSORBED POWER: 996Kw@580RPM ▪ MAX BRAKING TIME (design): 5 min.
Product(s)	D46KSL
Quantity	1
Power (kW) Speed (rpm) and accessories	• RATING: 3500 kW@1000 rpm 4000 kW@1200 rpm • 2 DISC BRAKES INPUT SIDE • 1 DISC BRAKE OUTPUT SIDE • 2 X 1000mm DISCS
Competitor(s)	Voith Turbo
Why we got this order	• Complete solution including Fulid Coupling, input and output elastic couplings, mechanical brakes • Competitive price • Full support during selection and engineering phase
Further comments	**MILL BRAKING PROCESS** • MAIN MOTOR STOPPED; FLUID COUPLING FEED PUMP STOPPED • AFTER COUPLING IS EMPTY, INPUT BRAKE (ONE) ACTIVATED. • AFTER MAIN MOTOR ROTOR IS STOPPED, SECOND INPUT BRAKE IS APPLIED. • FLUID COUPLING FEED PUMP IS ACTIVATED BY DCS. • THE FLUID COUPLING IS FILLED AND THE HYDRODYNAMIC BRAKING STARTS. THIS PROCESS CONTINUES UNTIL MILL ROTOR SPEED SLOWS DOWN TO 200RPM. • OUTPUT BRAKE IS ACTIVATED AND MILL ROTOR IS STOPPED.