

Class	CES range	Typical machines / plants
D	$0.40 \leq \text{CES} < 0.60$	<p>Lifting:</p> <ul style="list-style-type: none"> • Jib cranes; hoists / winches • Overhead cranes A3–A4 <p>Civil:</p> <ul style="list-style-type: none"> • Civil SDOF structures under seismic action • RC dissipation systems <p>High-Temperature Critical Zones:</p> <ul style="list-style-type: none"> • Rotary kiln calcination zone • EAF scrap entry zone • Ladle bottom zone • Furnace secondary combustion chambers <p>Piping & Thermal:</p> <ul style="list-style-type: none"> • High-temperature piping • Hot gas ducts / expansion joints • Hybrid steel–refractory transition joints <p>Fluid (service level):</p> <ul style="list-style-type: none"> • Service pumps; auxiliary fans; secondary hydraulics; HVAC