



**EUROPE
TECHNOLOGIES**

ORATECH



OUR SOLUTIONS FOR MONITORING MACHINING

2TPRO, EMMALITE and EMMATOOLS; we market these 3 products, the fruit of our expertise in machining analysis combined with the feedback from major contractors. Their purpose? To optimise your industrialisation, increase the OEE of your workshops, the quality of your machined parts and protect your resources.

Which product for which need?	INDUSTRIALISATION	SERIES
Identify & Analyse	2TPRO <ul style="list-style-type: none">Identify the best cutting conditionsAnalyse the operating conditionsPreventive maintenance (spindle signature)	
Protect		EMMALITE <ul style="list-style-type: none">Secure the machine during all machining stepsRecord all machine threshold overrunsPreventive maintenance (automatic spindle signature)
Protect & Capitalise	EMMATOOLS <ul style="list-style-type: none">Integration of all EMMALite functions (safety, preventive maintenance, etc.)Storage of the measured data (vibrations) and the machining context (rotation, advance, value of potentiometers, power, etc.), in order to better understand eventsAutomatic report creation	

	INDUSTRIALISATION		SERIES		
	Methods CAM programming	Verification of machine programs	Quality / FAI	Series production / quality	Maintenance
Identify & Analyse	<p>2TPRO</p> <ul style="list-style-type: none"> Definition of optimum cutting conditions (tool approval with tap testing and dynamic inspection) Use of the database constituted by the programming. 	<p>2TPRO</p> <ul style="list-style-type: none"> Verification over a short period of operating conditions (cutting conditions, machine requirements) 			<p>2TPRO</p> <ul style="list-style-type: none"> Identify the signature of your spindle.
Protect		<p>EMMALITE</p> <ul style="list-style-type: none"> Secures the machine via vibration analysis. <ul style="list-style-type: none"> Excessive vibration, collision, chatter, tool wear, balancing of tools. Possible vibration measurement in real time. 		<p>EMMALITE</p> <ul style="list-style-type: none"> Secures the machine via vibration analysis. <ul style="list-style-type: none"> Excessive vibration, collision, chatter, tool wear, balancing of tools. Possible vibration measurement in real time. 	<p>EMMALITE</p> <ul style="list-style-type: none"> Preventive maintenance. <ul style="list-style-type: none"> Periodic spindle signature. Alert history.
Protect & Capitalise		<p>EMMATOOLS</p> <ul style="list-style-type: none"> Secure with the same criteria as EMMALite. Database records all required values 24 hours a day: <ul style="list-style-type: none"> Axis positions Rotation Axis speeds Values of the advance and rotation potentiometers ... Create reports listing the demanding areas. Helps improve machining strategies. 	<p>EMMATOOLS</p> <ul style="list-style-type: none"> Create reports following the machining history to facilitate the understanding of defects. Possible to see the demanding zones on the programmed trajectory. 	<p>EMMATOOLS</p> <ul style="list-style-type: none"> Secure with the same criteria as EMMALite. Database records all required values 24 hours a day: <ul style="list-style-type: none"> Axis positions Rotation Axis speeds Values of the advance and rotation potentiometers ... Production monitoring. Identify the origins of machine stoppages. Possible to view the data of each machine via the internal network. 	<p>EMMATOOLS</p> <ul style="list-style-type: none"> Preventive maintenance. <ul style="list-style-type: none"> Periodic spindle signature. Alert history Fluid level Temperature ... Possible to view the data of each machine via the internal network.