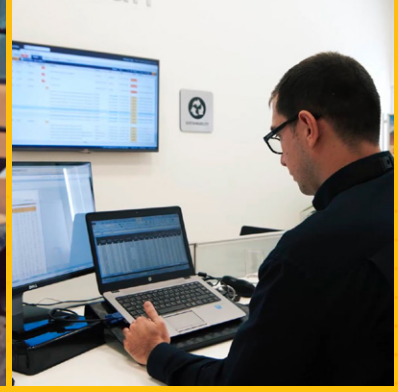


CAT® EMSOLUTIONS



MAXIMIZING UPTIME AND SAVINGS

AKMETAL MADENCİLİK





WORKING HARDER MEANS WORKING SMARTER

Two billion cubic meters is a lot of earthmoving and haulage. That's how much excavation and fill is needed to build the Istanbul Grand Airport (İGA), which is expected to be the world's largest airport. The deadline for completion — from groundbreaking to grand opening — is just 42 months.

A subcontractor on the project, Akmetal Madencilik, has put its mining know-how to work by doing some of the toughest hauling on the İGA jobsite. The loads are mine tails, water-logged dirt and clay — heavy materials that put Akmetal's trucks to the test. The pressure is intense and the production targets are demanding. So the Akmetal

team has to achieve maximum uptime and operational efficiency. That means putting Cat® EMSolutions technology and service to work with support from their Cat dealer, Borusan Makina ve Güç Sistemleri.

[CONTACT YOUR DEALER ▶](#)

HAULING 24/7 WITH +90% UPTIME

Akmetal's fleet of fifteen Cat 735 and 740B articulated trucks works two, 10-hour shifts a day and has to deliver over 90% uptime. That's a demanding standard to meet, particularly when operating trucks with an average of 15,000 clock hours.

Akmetal's Fleet Manager, Kerim Derse, saw that conventional equipment management techniques were not up to the task. Spreadsheets and manual data collection just couldn't deliver when the challenge was building the world's largest airport.

At the İGA jobsite, Akmetal took a new approach and implemented Cat EMSolutions Level 5, making its Cat dealer the key player on its equipment management team. Borusan proactively handles equipment monitoring, maintenance and repairs so Akmetal can focus on the business. That decision has paid off in increased uptime, savings on repairs and improved operations.



"For me as a mechanical engineer, even if they're the best machines in the world, the most important thing is service. If I don't get service on time, if I can't put my machine out in the field on time, that means less work and less profit."

—Kerim Derse
FLEET MANAGER | Akmetal



[CONTACT YOUR DEALER ▶](#)

CONDITION MONITORING CATCHES PROBLEMS EARLY

Condition Monitoring combined with S•O•SSM Fluid Analysis is a powerful problem-detecting solution that saves Akmetal money and keeps its trucks on the job. S•O•S testing indicated that a problem might be developing in the transmission of one of the trucks. The Borusan team cross-checked with the VisionLink[®] data, which confirmed the S•O•S results. The repair crew sent to inspect the truck conducted a magnetic plug inspection that verified there were metal particles in the transmission fluid. The decision was made to pull the transmission, clean it and make small repairs. The entire process took just two days. That data-driven decision prevented a full transmission overhaul and saved Akmetal €50,000 in repair costs not to mention almost two weeks of working time.



"When I look at how we used to do things, we could only figure out where problems were by trial-and-error. But now with Cat **EMSolutions** Level 5 remote monitoring, we can quickly identify the failure and get our equipment back on the road."

—Ufuk Topçu
SITE MANAGER | Akmetal



With strict production timelines and targets on a rapidly changing 80-square-kilometer jobsite, Akmetal had to manage its people as proactively as it managed its equipment. Specific alerts from VisionLink revealed that operators were coasting downhill in neutral,

"My trucks mean money – they mean profits. In percentage terms, we've been able to save a minimum of 60-70%. In terms of bringing our costs down, Caterpillar and their Turkish dealer Borusan provide us with continuous service."

—Kerim Derse
FLEET MANAGER | Akmetal

potentially shortening transmission life. Worse, some operators were shifting to make the truck jerk and knock loose material while dumping.

Armed with solid data and consulting services from its Cat dealer, Akmetal took action, organizing operator training provided by certified trainers from Borusan Makina. Training corrected the operator error, but that was just the beginning. Better trained operators working smarter were able to reduce fuel consumption by 15%. That's proof of how empowering people with training and skills generates measurable returns on multiple fronts and motivates operators to deliver their best.

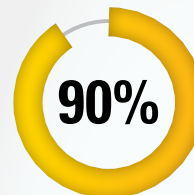
CONTACT YOUR DEALER ►

BETTER DATA DELIVERS QUANTIFIABLE RESULTS FOR AKMETAL

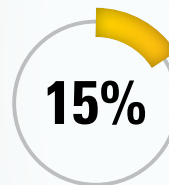
Making the shift from conventional equipment monitoring and management techniques gave the engineers running Akmetal's operations on the İGA jobsite the data they needed to optimize operations. Cat EMSolutions helped them achieve enhanced productivity while reducing repairs and operating costs. Site manager Ufuk Topçu says that in cold, hard numbers, repair costs are down by 60-70%, fuel costs are down 15% and Akmetal's operators are better trained and working smarter. For a high-performance trucking operation working in demanding conditions like Akmetal, those savings translate into hundreds of thousands of euros per year.

[CONTACT YOUR DEALER ►](#)

INCREASED PRODUCTIVITY & SAVINGS WITH CAT EMSOLUTIONS



increased
uptime, over 90%



reduction in
fuel costs



reduction in
repair costs

"On a big project like İGA, from a fleet management perspective I can say that Cat EMSolutions is a must to minimize expenses and maximize revenue."

—Kerim Derse
FLEET MANAGER | Akmetal

BUILT FOR IT.

© 2016 Caterpillar All Rights Reserved.

CAT, CATERPILLAR, BUILT FOR IT, their respective logos, "Caterpillar Yellow," the "Power Edge" trade dress and Product Link, as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission. VisionLink is a trademark of Trimble Navigation Limited, registered in the United States and in other countries.

