

NYT: "The Steel Heart of Ukraine" as a driving force behind the country's resistance

A major article in The New York Times about Metinvest Group's enterprises, which, despite the war, continue to operate and are doing everything possible to ensure Ukraine's victory.



Photographs and Text by Finbarr O'Reilly

The iron- and steel-producing factories of Ukraine's rust belt have made body armor and armored plates for vehicles — and steelworkers risked their lives rolling out heavy machinery at the beginning of the war to help physically block the Russian advance.

Inside the gloom of the vast Zaporizhstal* steel plant, a towering blast furnace wheezes like a giant black lung, inhaling chunks of iron ore, thermal coal and limestone, blending them at temperatures reaching several thousand degrees with oxygen-enriched air, and then exhaling vapor and molten metal.

Lava-like liquid oozes from the base of the furnace as soot-coated men in hooded reflective suits, thick gloves and protective visors steer the candescent flow with ladles the length of spears.

Sparks dance as caldrons of glowing pig iron are then poured into casts to make brick-size ingots in one of the many stages of iron and steel production at this plant in the Ukrainian city of Zaporizhzhia, where Zaporizhstal's smokestacks dominate the skyline.

The iron- and steel-producing regions of southern and central Ukraine's rust belt have long been an economic engine for the country, but Russia's invasion has battered the industry and forced it onto a war footing. The factories have made body armor, armored plates for vehicles, hedgehogs — spiky X-shaped street barricades — and steelworkers risked their lives rolling out heavy machinery at the beginning of the war to build fortifications to physically block the Russian advance.

"The Steel Heart of Ukraine," as it is known, has been a driving force behind the country's resistance.



The Zaporizhstal steel plant is run by Metinvest, Ukraine's largest private company controlled by the country's richest man, Rinat Akhmetov.



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"We are trying to protect our country," said Zaporizhstal's chief executive, Oleksandr Myronenko (his role at the time of the interview, Oleksandr is now COO of Metinvest Group - ed.) [1] explaining how steelworkers have also joined the army or doubled as humanitarian volunteers. "If we don't, we will lose our home. That's why there is one collective aim now in Ukraine."

Invaders have always coveted Ukraine's industrial heartlands. During World War II, Hitler briefly occupied parts of the prized iron and steel regions, but his forces were ousted by the Soviet Army. Now, it's the Russians who have seized plants in the Donbas region, and, when they came for Zaporizhzhia in February 2022, the Zaporizhstal plant shut down for a month for the first time since the Nazi occupation.

The Russians never made it to Zaporizhzhia; Ukrainian forces blocked them from taking the city. But Moscow's forces do occupy some southern parts of the Zaporizhzhia region.

Only two of Zaporizhstal's four blast furnaces have since resumed operation (this was the case when the author visited the plant, one more blast furnace has since resumed operation - ed.)[2], reflecting its diminished output since Russia's invasion. But this war has forged Ukraine's steel plants into legend. During the siege of Mariupol, Ukrainian forces held out under a withering Russian assault for weeks inside the warren of tunnels and nuclear bunkers at Azovstal Iron and Steel Works, turning the battle into a symbol of Ukraine's fighting spirit.



Factory workers preparing packages of food to be donated to civilians and people displaced by the war



A Soviet-era mural outside the Zaporistahl steel plant showing ironworkers handing a freshly forged sword to soldiers heading off to war.



Workers went to a bomb shelter in Zaporizhzhia when air raid sirens sounded in November. The factory has 16 well-equipped bomb shelters that can sustain 300 people each for days.

Destroyed by Russian bombardment, Azovstal and Ilyich Steel, another Mariupol plant, are now behind enemy lines. Before the invasion, they were Ukraine's two largest metallurgical plants, accounting for 41 percent of steel production. Like Zaporizhstal, both plants are run by Metinvest, Ukraine's largest private company, controlled by the country's richest man, Rinat Akhmetov.

Steel is the most commonly used metal in the world, with nearly two billion tons manufactured globally each year. Smelted iron is the main component of steel, used in construction, vehicles, furniture, plumbing, computers, energy infrastructure and weapons — including the shells being forged in the United States for use in artillery across Ukraine.

Metallurgical production is Ukraine's second-leading industry after agriculture, making up 20 percent of foreign exports. But the country's steel production, which was ninth in the world in 2021, plummeted by 70 percent in 2022, mainly because of the destruction of major plants, Ukrmetprom, the steel makers association, said in January.

Despite the losses, Metinvest has spent nearly 3 billion hryvnias (about \$81 million) contributing to the war effort since the invasion in February 2022, according to Mr. Myronenko.



A festival to raise funds in support of Ukraine's armed forces in the city of Kryvyi Rih.



Ukrainian sappers in October searching the heavily shelled grounds of a schoolyard for possible explosives and booby traps in a part of the Kherson region that was previously occupied by Russian forces.



A cemetery in Kryvyi Rih for members of the Ukrainian armed forces killed since Russia's invasion.

Ukraine's iron ore deposits — the fifth largest in the world — have sustained families like the Mashchenkos for generations. While steel production is spread across the east and south, most mines are concentrated around the central city of Kryvyi Rih, the hometown of President Volodymyr Zelensky.

The region's earth is so rich in iron that a layer of rust-color dust cloaks the city, which is almost 60 miles long and 16 miles wide. The extractive industry employs nearly two-thirds of the city's work force, many of whom live in Soviet-stye block tenements, some adorned with towering mosaics of steelworkers.

Metinvest excavates ore at several sites in Kryvyi Rih, including the Hleyuvatka open pit mine, a giant terraced crater spanning three miles and running as deep as several football fields. Giant yellow trucks that grind up dirt roads can carry loads equal to 40 elephants. Against the scale of the mine, the trucks look as tiny as ants.

Controlled explosions at the Hlevakha open pit mine

The city remains within the cross hairs of Russian missiles and has been hit by waves of regular bombardment targeting infrastructure across the country. Russia's naval blockade of Ukraine's Black Sea ports has also hampered the country's ability to ship its most valuable exports — steel, grain and fertilizer — to international markets, creating food shortages, inflating prices and spurring global insecurity.