Central Program Distribution to CNC Machines (W-Stick)

Sending G-code programs to several CNC machines from a single point

Programs are sent from one point; operators start jobs without loading anything at the machine

CLIENT	Automotive supplier Anonymous
INDUSTRY	Automotive
PROJECT TYPE	Custom Software
DURATION	1 months (05/2024 – 05/2024)
TECHNOLOGIES	C# SQLite XAML WPF (.NET) Gömülü Linux

Send a program once, have it ready on every machine

A USB device and management application that distributes G-code programs to CNC machines of different makes from one point. No changes are needed on the machines.

Highlights

6	**3+**	**1**
CNC machines in testing	Controller makes	Central sending point

The problem: the program is on a stick, the job is on a machine

Job programs (G-code) usually reach CNC machines on a USB stick: prepared in engineering, copied to a stick, carried to the machine and loaded. If the same part runs on several machines, every step repeats for each one. Controllers from different makers make a central solution harder; each maker's network option differs and some machines have none. The one thing they all share is the USB port. Send a program from one point to several machines at once
Work without changing software or settings on the machines
See centrally which program is on which machine
Record who sent which program, and when

To the machine, just a USB drive plugged in

Every machine on one screen

Carrying a stick versus W-Stick

Brand-independent, because USB is the common language

What it makes easier on the shop floor

Management application screens

A repetitive task on your shop floor?