

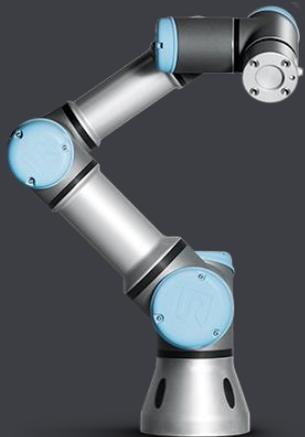
LORCH

LORCH COBOT WELDING

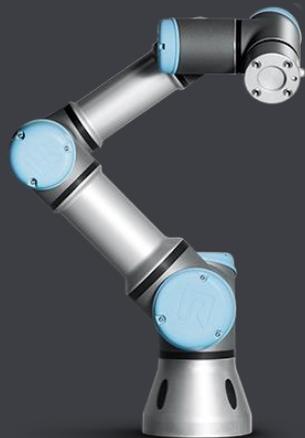
**UNE NOUVELLE FAÇON DE
TRAVAILLER.**



UN OUTIL TOUT USAGE



UN OUTIL TOUT USAGE DEVIENT UN SOUDAGE-COBOT



UN OUTIL TOUT USAGE DEVIENT: UNE SOLUTION DE SOUDAGE COLLABORATIVE

Complété par les Services fournis par
les partenaires de Lorch Cobot proche de nos clients,
Lorch crée à partir du Cobot :

LE LORCH COBOT WELDING PACKAGE



LORCH COBOT WELDING PACKAGE



Services

Services: La clé du succès

+

Welding

Expérience, technologie de soudage et logiciels spécifiques, le transforme en cobot de soudage

+

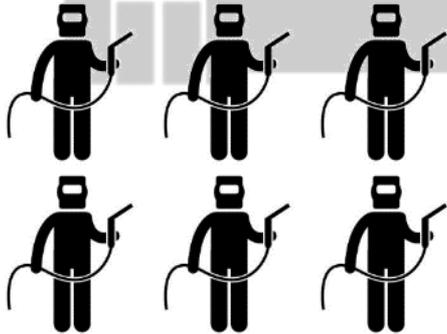
Cobot

Cobot UR10:
Bases solides

PROBLÉMATIQUE AUJOURD'HUI: MANQUE DE PERSONNEL QUALIFIÉ

**Situation optimale
à ce jour**

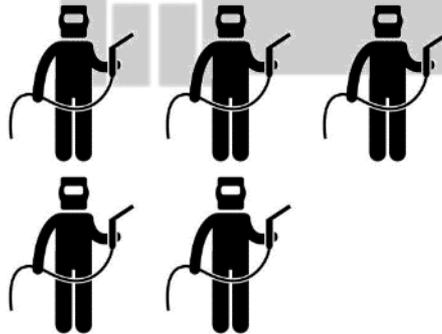
6



6 soudeurs c'est ce dont on a besoin

**Situation réelle
aujourd'hui**

5



5 soudeurs c'est ce que nous avons

**Situation dans
quelques années**

3



Que vais-je faire avec les trois
soudeurs restant quand les
deux autres seront en retraite?

PRODUCTION DU FUTUR ... AVEC LE COLLÈGUE COBOT



3

Soudeurs



Préparation et
programmation Cobot
+ soudure manuelle

+

2

Système de
soudage Cobot



+

2

Opérateurs



Production du cobot
Changement de pièce

CHEZ LORCH LE COBOT FAIT PARTI DE L'ÉQUIPE



LORCH

CONTENU DU PACKAGE & CE

PACK DISPONIBLES

	Package A	Package B	Package C	Package D
UR10 contrôle et panneau d'opération inclus	•	•	•	•
Lorch S-RoboMIG XT avec dévidoir et 3 ans de garanties	Dévidoir type atelier	Dévidoir type atelier	Double dévidoir	Dévidoir type atelier
Faisceau 70 mm ²	1 m	10 m	1 m	1 m
Lorch LMR 450 W Cobot torche, 3,5 m incl. Consommable	•	•	•	–
TBI PushPull Cobot-torch, 3,5 m incl. consommable	–	–	–	•
Équilibreuse, Equipement pour la manipulation des flexibles, pédale de commande, bouton de fonction avec arrêt d'urgence, plaque de montage, câble de terre 70 mm ² , adaptateur de bobine de fil	•	•	•	•
Marquage CE (utilisation prévue; Cobot pour le soudage sur table de soudage)	•	•	•	•

CONTENU DU PACKAGE

- Cobot incl. Logiciel Cobotronic
- S5 Robomig XT – FULL PROCESS avec interface Cobot
- Torche Lorch incluant l'ensemble de pièces d'usure initiale
- Équilibreur
- Panneau de commande avec arrêt et démarrage d'urgence
- Bouton départ cycle
- Câble de masse 70mm², avec serrage à vis
- Matériel de montage pour table de soudage avec trous 16 et 28 mm



CONTENU DU PACKAGE



SPÉCIFICATIONS TECHNIQUES

S5 Robomig Speedpulse XT

- Dévidoir d'atelier simple ou double dévidoir
- Faisceau 70mm²
- Full process
- Refroidissement renforcé
- 2x Connexions Lorchnet
- Dévidoir avec 4 galets entraînés
- Rétrait possible du fil via l'interface sur UR
- Galets DV acier 1.0 / 1.2
- Sur roue 125-200 mm avec chariot bouteille
- Adaptateur de bobine de fil K300



SPECIFICATIONS TECHNIQUES

Universal Robots UR10 Cobot

Technical dats	
Poids	28,9 kg
Empattement	1300 mm
Ecran	Touch Screen 12"
Tolérance	+/- 0,1 mm
Nombre d'axes	6 rotating joints
Rotation	+/- 360 °
Alimentation	230 Volt 1 ~
autres	1 year warranty, 2 years optional



SPECIFICATIONS TECHNIQUES



Cobot welding torche LMR 450 W

- Corps profilé
- Construction Robuste
- Double circuit de refroidissement liquide
- 450 Amp à 100%
- Faisceau de torche 3,5 m
- Support de torche optimisé pour facilité les accès
- Jeu de pièces d'usure initiale pour acier 1,0/1,2/acier et inoxydable inclus dans la livraison

SPECIFICATIONS TECHNIQUES

Consommables spécifique Lorch

- Buse conique mince
- Cuvrur pour une durée de vie élevée
- Auto-centré
- Tube contact court ou long

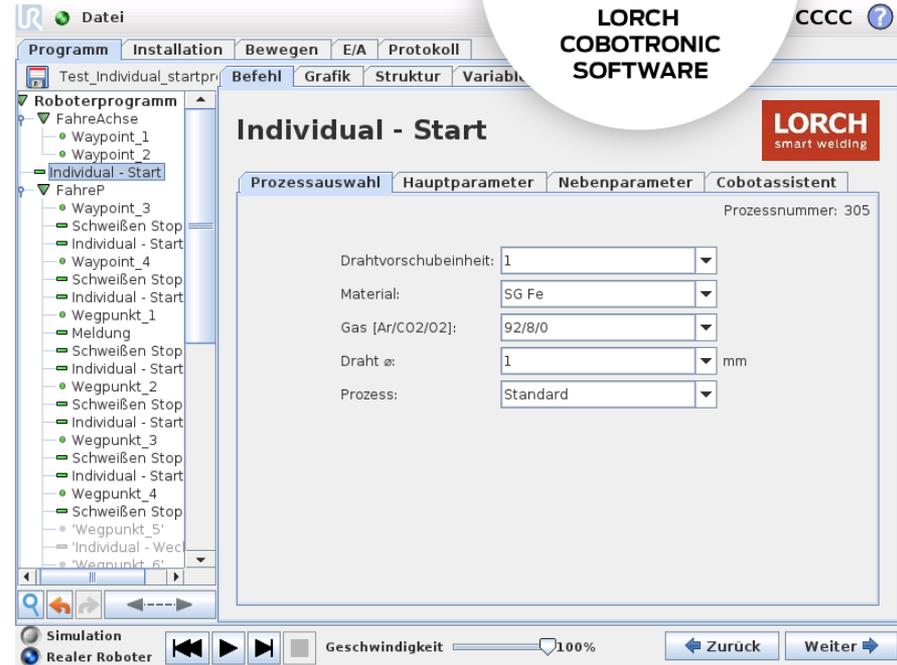


SPECIFICATIONS TECHNIQUES

Cobotronic Software

- Job mode
- Individual Mode
- Assistant Mode

Choix du mode d'integration des Paramètres de soudage dans le Programme en fonction de L'utilisateur



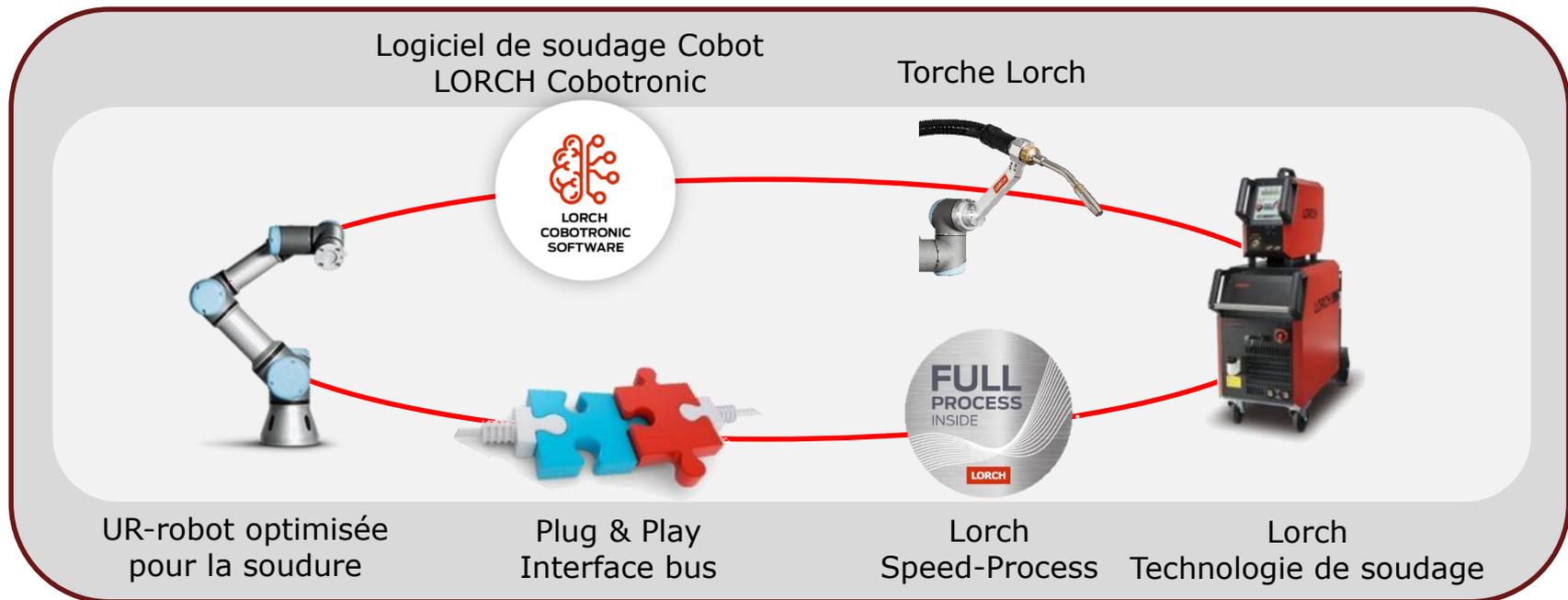
AUTRES ACCESSOIRES

- Buse de guidage pour effectuer des trajectoires précises
- Support de panneau de commande
- Bouton d'arrêt d'urgence séparé
- Voyant de signalisation (option)
- Capot de protection du panneau de commande
- Stylo tactile

* Tous les articles du colis du distributeur initial ne sont pas inclus dans les colis standard.



UNE SYNERGIE PARFAITE DU PACKAGE PEUT CRÉER DE LA VALEUR AJOUTÉE



CE – CERTIFICATION MACHINE

OPTIMISATION DU PACKAGE

- Paramétrage sûr du système
 - Système en mode réduit en standard
 - Limitation TCP avec niveaux de sécurité
 - Interrupteur à 3 pas pour Freedrive
 - Verrouillage utilisateur avec mot de passe
 - Assemblage sûr
- Espace libre autour du système
 - Cible : Minimiser les blessures par collision avec Cobot



DE LA CONCEPTION A LA CERTIFICATION CE

System components

Individual CE Declarations (of Incorporation)

Determination of **general** suitability and conditions for automated use.



CE-compliant system components

responsible:

Component manufacturer

Overall system

CE Declaration for the overall system according to the Machinery Directive 2006/42/EC

Determination of **specific** suitability and conditions for automated use at the customer's + definition of safe environmental conditions and conditions of use.



Delivery of the overall system including operating manual; training of Lorch Cobot partner

Intended use:
Cobot mounted on welding bench for welding operation.

responsible:

Lorch

Handover of overall system

CE-compliant handover of the system

Commissioning of the overall system including training reflecting the environmental conditions and the conditions of use.



Übergabe-Protokoll (Unterschrift Kunde und Lorch Cobot Partner)

Adjustment of safety-related Cobot settings to the specific situation at the customer's (e.g. size of the welding bench, installation position of the welding bench).

responsible:

Lorch Cobot partner

Operation

CE-compliant operation

Risk-aware use of the overall system according to the specifications provided by Lorch – **duty of the operator.**



Change In conditions of use may require an adjustment of the safety-related settings (e.g. Cobot operating ranges after a welding bench change).

A substantial system modification performed by the operator, the Cobot partner or a third party requires that the party responsible for the modification perform another risk assessment as part of the CE conformity evaluation.

responsible:

End customer (operator)

FAQ

What is CE?

The CE marking is a certification mark issued by the European Union. By applying the CE marking the manufacturer declares the conformity of their product with all statutory safety requirements applicable in the EU.

Is CE-conformity subject to verification?

While responsibility for CE conformity generally lies with the manufacturer themselves, a small number of particularly dangerous products (machine saws, chain saws, vehicle lifting platforms, etc.) are subject to mandatory testing, which needs to be conducted by a neutral inspection authority. Most other types of machinery and all electrical devices merely require that the manufacturer themselves provide certification of CE conformity by completing the conformity evaluation procedure (required by law), documenting the procedure and confirming CE conformity by issuing the Declaration of Conformity and the CE marking.

What is Lorch's CE Declaration procedure for the Cobot Welding Package?

Lorch has teamed up with an independent, specialised and experienced service provider to prepare a detailed risk assessment in accordance in an effort to ensure that all aspects relevant to the Cobot Welding Package are incorporated and that the requirements imposed on the Cobot Welding Package itself and the necessary environmental conditions and the prerequisite skills at the user's are defined properly. Lorch and their new partner used the results of this assessment to devise the Lorch Welding Package, the associated documentation and the instruction program for the customer. The product of our development is the Lorch Cobot Welding Package, representing a legally compliant solution for automated welding as part of a human-robot collaboration.

Which main risks are involved with Cobot welding?

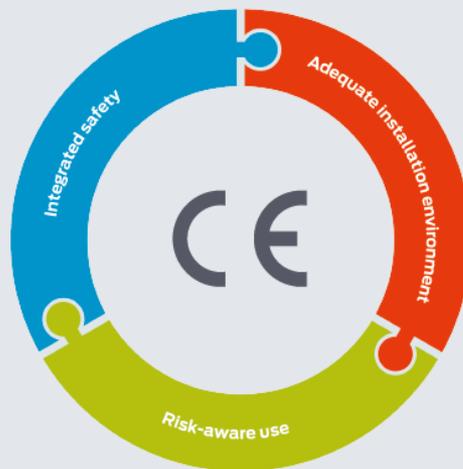
Aside from the movements of the robot, the main risks arising from Cobot welding are contact with the protruding end of the wire, "welder's flash" from an arc flash and coming into contact with the torch, which will heat up during welding. A collaborative robot must possess certain inherent safety features and move at a rate of speed that has been adapted to human beings. The specific risks linked to welding with the Cobot are counteracted by safety elements integrated through hardware and software, clearly defined installation conditions and specifications in the operating manual that are adequate to ensure risk-aware use. These measures will be adapted to the customer's specific situation when the system is put into service.

Concrete handling of potential hazards, e.g. in connection with the torch heating up during use?

Our comprehensive risk assessment has established that only water-cooled torch systems will ensure the necessary safety during the application of a Cobot welding system. This finding is based on the fact the liquid-cooled torches – if used properly – heat up to a significantly lesser degree than gas-cooled torches. To keep the risk to the user in the harmless range to the greatest possible extent, the Lorch Cobot torch has been matched to the welding machine in terms of its output and been equipped with a double-circuit cooling system. What is more, all welding machines that ship as part of the Lorch Cobot Welding Package come standard with a water cooling system that delivers enhanced cooling performance.

Notices regarding the EU Declaration of Conformity

COBOT WELDING



08137: Technical changes and printing errors reserved.

Lorch COBOT WELDING PACKAGE

**MAKES
YOUR TEAM
STRONGER**