Ruwac's history begins with a redundancy. Siegfried Wagner, just 40 years old, was made redundant in the mid 1970s by a vacuum company. He had been high up in the firm that he knew like no other; he was also ambitious and it wasn't long before he had an idea. But as a trained businessman, he needed a partner for the idea, an engineer. Or to be more precise, someone also from the industrial vacuum business. To put an even finer point on it, the most skilled engineer and inventor of all. Namely Manfred Runge, 10 years younger than Wagner, already a vacuum engineer at the time having trained as an agricultural machinery and car mechanic. They knew each other, they valued each other. Both back then in the early days of Ruwac and to this day. Wagner on Runge today: “He was the only one who could make an Otto engine out of a rusty nail.” Runge on Wagner: “He was the only one who could sell vacuums that hadn't even been finished yet.” Respect!

Ruwac's history continues with the proverbial garage that is sometimes part of the founder's legend; in this case it was a basement, followed by a barn, which was subsequently fitted with heating and all sorts of technical equipment: a large heated workshop. It was inside these four walls in Nienhagen in the district of Celle, that Manfred Runge put the vacuums together. One hundred percent pure, hard manual labour. Hard graft with few employees. Runge's aim was to build models that the competition didn't have. The pair's motto was not to talk about the vacuums, but about how to "solve problems." That motto is what they still believe today. Quickmix in Kiel bought the first vacuum in 1976 for a couple of thousand deutschmarks; “Ru” and “Wag” shipped it single-handedly to the north from the basement on a borrowed trailer.

How did the name "Ruwac" come about? Originally Ruwac was called "Ruwag" with a handwritten logo and a curled "G" at the end. This was a contraction of Runge and Wagner. However in 1977 a powerful rival thought that this "ag" at the end indicated that the enterprise was a public limited company ("AG" in German), and in any case “Ru” and “Wag” were merely "slavishly cloning" existing products. This culminated in a court case in Hamburg which the pair left as the first Ruwacers with a C at the end (there had to be some concession) but otherwise superbly victorious in all counts.

Back then, in the early days of the company, Wagner the businessman sat alone in a “cottage with office” in Riemsloh, 143 kilometres away from Runge's improvised workshop.
Imagine the situation: the two heads of the company, located at two different sites: one sells, the other potters away; one travels around offering new concepts that he knows the other hasn’t even built yet.

A simply ingenious team that only came together in 1980 at the current site in Riemsloh - and has continued to grow steadily. Wagner in 2009: “Nothing was impossible!” Runge in 2009: “We just kept trying and trying, and then we made the ‘polished’ version.” Remember, all this at two different locations.

When the first models of the hugely successful DS 1000 series were delivered, three decisions were taken very early on: the first was for GRP, the second was for the modular system which is still used today to build the vacuums, and the third was for RAL-3000 red as the main colour. And the fourth policy was never up for serious discussion: “We build the best vacuums, then we’ll grow by virtue of quality.”
In the hall of a south German building materials company, staff shunt seven black Ruwacs one by one. A vacuum parade of parade vacuums. Right in the thick of things on this rainy day in the warm hall a member of the Ruwac after-sales service team doing what he does day in day out: he waits for vacuums awaiting maintenance. Routine, matter-of-course routine, as set out in the Ruwac contract: check the suction power, test the hose, empty the dustbin, inspect the seals, clean the appliance, change the filter, affix the test seal. Repairs? Not usually. A vacuum line, which produces individual models with a lifespan of 30 years, only rarely gets black sheep in need of repair.

The work of the after-sales service staff comprises routine tasks, maintenance, checking and examining. Depending on how intensively the vacuum is used and the terms of the contract, after-sales staff call by up to four times a year; one-off maintenance, however, is the norm.

A total of 17 after-sales staff travel throughout Germany for Ruwac; the country is divided up and the appointments are fixed. The after-sales staff are one side of the face of Ruwac on the ground; they represent the Riemsloh-based company in customer relations once the field staff no longer have to make regular visits for advice and sales because the vacuums are working the way they’re supposed to and the company doesn’t have any problems using them.

Over 30 years ago Ruwac adopted the principle that its staff had to be where the appliances were being used: in the factories. Sending the appliances to Riemsloh simply to have a wheel changed or a hose replaced - that’s not part of the Riemsloh company’s business plan. And it’s stood them in good stead for several decades. The 32 sales representatives constitute the other side of the face of Ruwac. This is an even more extensive network of specialists who stay in contact with the customer.
And what’s more, anyone who has ever been around when a Ruwac sales representative has been holding an initial meeting with a new customer will realise that it’s not so much about selling the appliances, but rather individual, professional advice on site: what does the company produce, what exactly has to be vacuumed? Are the substances explosive? How often is vacuuming required? But most importantly: what are the regulations stipulated by the professional association - does the company comply with the legal requirements? Are there any by-products which could trigger chemical reactions?

Ruwac sales representatives are first and foremost experts, who know best about the chemical and physical incidents that must be taken into account in industrial vacuuming.

“You can’t,” explains an experienced Ruwac employee, “order industrial vacuums commercially or on the Internet. You can’t do anything without specific knowledge of the individual site! That’s Ruwac’s motto: we’re only available in person!”

And so we learn that appliances like Ruwacs are only sold reliably face to face and on inspection. With knowledge of the location. And with staff who usually know more than the directors, buyers and plant managers in the companies: i.e. everything there is to know about compulsory extraction. Absolutely everything.
The six principles of Ruwac

To become big over more than 30 years, to grow for more than 30 years, to become one of the market leaders in Germany, to tap into international markets. In other words, to reach the point Ruwac is at today, the company has had to adhere to principles that its founders Manfred Runge and Siegfried Wagner set out as far back as 1976. These principles are basically the same today.

First principle: Handmade in Riemsloh.
All the vacuums that leave the company are still assembled by hand. The staff that are responsible for production know every screw of every vacuum, and it goes without saying that no appliance is put onto a lorry without undergoing a thorough and reliable final inspection.

Second principle: Individual planning.
Customer satisfaction is paramount. Most solutions required by companies can be realised with Ruwac's standard appliances. Nevertheless, the sales representatives are trained to investigate every (and that means without exception EVERY) eventuality of use to prevent any onset of an explosion in danger zones when using a "Ruwac". It goes without saying that Ruwac knows virtually every chemical/physical composition and that the company knows the current European regulations inside out.

Third principle: The right basis material.
In 1976 the founders decided to use glass fibre reinforced plastic (GRP) as the basis material. Nowadays GRP is used in superior car construction, to name but one industry; back then the decision for GRP was virtually revolutionary. The main advantage of GRP, besides the physicochemical benefit is that the material is immensely durable. There are first generation vacuums from the end of the 70s which are still fully operational today provided they are regularly maintained.

Fourth principle: The right filter.
Vacuuming means first and foremost filtering - filtering the harmful substances and separating the filtered substances. When it comes to choosing the square-metre sized filter surfaces folded in the vacuums Ruwac works together with institutions which develop ever more efficient "dirt traps" - and with a company that develops these filters. It is then the job of the production department in Riemsloh to ensure that the right filters end up in the vacuum.

Fifth principle: Research and development.
Even if the principles have been around a long time, Ruwac
understands the importance of continuing to keep ahead of the game with regard to every dust particle and chemical that has to be disposed of in accordance with the regulations in rapidly changing industrial production. In Riemsloh, therefore, there are always new demands and new solutions to be tackled. It is a continuous process of research, testing and development.

**Sixth principle: Quality.**

One of the principles is the sum of the other five: Manfred Runge and Siegfried Wagner developed new vacuums, and they developed their business - and ever since, Ruwac has adhered to the one principle that takes precedence over all else: "We stand for quality. Quality stands above all else!"
How do the red and black Ruwac vacuums get abroad, say for example to the USA? The most proven method of all: all the individual parts are loaded onto freight containers at the plant in Riemsloh. These containers are then stowed on ships and unloaded again at the Ruwac subsidiary in the USA. Ruwac USA in Holyoke, Massachusetts, assembles the vacuums according to customer requirements. No great mystery so far. Preparing parts for export abroad is daily routine at Riemsloh. And even though the national market is still Ruwac’s domain and neighbouring Europe is well provided for with branches and short transport routes, Russia and Asia in particular are becoming increasingly important. So how do the vacuums get to, for example, China, where Ruwac doesn’t yet have a base for assembling the vacuums?

Take a German machine builder with its parent company in Hamburg. This company is an original equipment manufacturer selling its own machinery to Shanghai, plus the required number of Ruwac vacuums (or even an entire system). And the experts from Riemsloh only make an appearance when real support is required: they train the new staff on the ground so that they will soon be able to work independently, undertaking repair and maintenance work until the locals are able to do these things for themselves. Axel Runge, Sales Manager at Ruwac: "Ruwac wants to be where the vacuums are!" That is why Ruwac has established a branch in Singapore, is currently working on Thailand and intends to slowly conquer the Asian market in this way. The same goes for the Russian market.

And what happens when a Ruwac system on a trawler in the middle of the Atlantic ceases to function thus preventing the trawler from doing its job?
Facts

Ruwac exports to every country in the world
Ruwac has dealerships in the following countries:

- Belgium
- Bulgaria
- Denmark
- Finland
- France
- Greece
- United Kingdom
- Ireland
- Italy
- Liechtenstein
- Luxembourg
- Malaysia
- Macedonia
- The Netherlands
- Austria
- Poland
- Russia
- Switzerland
- Sweden
- Singapore
- Slovenia
- Slovak Republic
- Spain
- Czech Republic
- Thailand
- Turkey
- USA

A rare occurrence, but it has happened. Axel Runge: “Ships in particular have very able engineers. And since our vacuums aren’t really that complicated, we can always give precise instructions. In this way we were able to resolve the problem quickly.” So Ruwac doesn’t always have to be where the vacuums are.
Let's look at both ends of the scale in practice. This offers an ideal insight into Ruwac's products: at one end Enercon in Aurich, East Frisia, manufacturer of wind turbines, a truly huge plant. At the other end, a small yet, fine forge in Mönchengladbach with just one vacuum which has been in operation for years.

To reach the Ruwac at Enercon, an absolute Goliath of the Riemsloh range, visitors must pass through the gate at the main entrance, present their ID and the reason for their visit, taxi across the grounds to a dedicated hall where a towering grey and white (!) system, which was made by Ruwac especially for the high demands of the wind system manufacturer, reaches dizzy heights. The layperson can but marvel. And then they learn, namely that in the hall where the majestic blades of the wind turbines are hardened, cast and then sanded, this "Goliath" controls the entire suction power. Vacuums aren't shunted about here; workers simply connect the hose and nozzle to a suction system under the "rotor blade work space."

Change of location, a three hour drive south: a back yard in Mönchengladbach, a workshop on what seems like 150 square metres. No security on entry. Predominant colour: dusty black. Predominant ambiance: sweat. Predominant sound: hammering. This is where Damascus blacksmith Peter John Stienen, one of the few master craftsmen in the world who can make
and bustle everywhere, people and machines everywhere providing first-class work, and always someone who sticks the grey hose into the mount underneath the blades and vacuums. And the plant manager says: “Good work. We considered it very carefully and opted for Ruwac.”

What the Damascus blacksmith vacuums is plain for all to see. Laypeople call it dust, black dust. Whatever it is that is produced when that compact, double alloy, repeatedly folded steel “parcel” is put into a hot furnace at around one thousand degrees for working with a hammer that weighs tons (for every square centimetre).

Does the Ruwac vacuum well, Herr Stienen? The man prefers to talk about his handcraft. “Yeah, it’s good. No complaints and always there. You can see what it’s like here!”

We can see. And marvel ever so slightly at these different applications of the equipment from Riemsloh. The only thing they have in common: precision. In Aurich the wind cutting ability and in Mönchengladbach the cutting blade that is produced.

knives and swords from Damascus steel, works. You’ll find the “Ruwac” - a WS 2320 (a real “David” in the Ruwac range) - eventually even though its famous red has given way to a sooty black. It’s obvious that the vacuum whose heat-faded rating plate no longer reveals its age, is used for dirty work on a daily basis. It’s a dirty place to be here!

Visitors leave Enercon clean. They stand there wide eyed in the football pitch sized hall where Enercon manufactures the rotor blades. Hustle and bustle everywhere, people and machines everywhere providing first-class work, and always someone who sticks the grey hose into the mount underneath the blades and vacuums. And the plant manager says: “Good work. We considered it very carefully and opted for Ruwac.”

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We vacuum everything!

Vacuums for special applications: A Ruwac being used by the fire brigade.

Ruwac vacuum with pre-separator for ultimate heavy duty in the shipyard.

The steel for precious blades is forged and the Ruwac vacuums up the dust.

Relying on the Ruwac to vacuum the fish food in the explosive dust area.

The shaving extractor vacuums oil and shavings together and separates them inside the vacuum.

Large areas can be treated using the Ruwac special nozzle, which is fitted in front of the vacuum.
Ruwac vacuum system that vacuums paper strips, in blue at the customer’s request.

Outdoor use: natural rock being stabilised. Waste stone dust ends up in the Ruwac.

The Ruwac is invisible here: vacuuming is performed by a large vacuum system at a rotor blade manufacturing plant.

Explosion-proof vacuums are used in hard to reach areas in the chemical industry.

Large quantities of salt are vacuumed using silo systems.

The machine for manufacturing cat food is carefully cleaned using a Ruwac vacuum.
Let's talk about the formula for voltage drop. No, we're not going to explain the formula, we're going to talk about someone who didn't even know a few months ago that there was such a formula. And now he works with it every day. And you can see in his face that he's happy to work with this formula. Or to be more precise, has the privilege of working with it. Daniel Pablos-Medina, born in 1990, has hit the ground running with Ruwac. He's a trainee, an apprentice.

Let's talk about someone who has experience of working life, and who - with some embarrassment - has to think for a minute before answering the question "why Ruwac?": "No dress code". And who then goes on to highlight the working environment at Ruwac. Anna-Lena Bungenstock, born in 1986, is a trainee at Ruwac. Her ambition: to be an industrial clerk.

What we're talking about is Ruwac's youth. At some point Daniel understood that there was a red warning sign attached to his application to Ruwac: my life depends on this! Not to overdramatise it. That's what he said. He has matured at an early age, understanding the difference between opportunity and lack of opportunity. He seized the opportunity. One of the Ruwac members of staff who tested him says: "It was clear we needed him. He's unique." In what way?

"Just quite gifted." - Anna-Lena first did a placement; she's one of the "placement generation". She was so good that Ruwac employed her after her placement for a different, simple office job, until she began her actual training months later. Are they happy? They laugh. Anna-Lena has regained her composure and says: "It's how I planned it. I wanted to come here after business school. A small industrial firm, that was it. Not too formal. It was perfect for me!"

And Daniel? Daniel wants to progress. Evening classes. Qualification. Learn more than the formula for voltage drop. "When I have my engineer..." He doesn't finish the sentence. And the enquirer adds: "... then you'll go surfing in Hawaii, just have fun and work there!"

No chance! What's amazing about the placement generation is that even though they've just come of age, they believe that once they've found the company, that'll be them for life. Both of them want to stay at Ruwac: "Yes, of course!" says Anna-Lena, "the company is growing!" And Daniel: "I can get my qualifications here. And become plant manager."

And Ruwac HR manageress Anke Radewald says about the pair: "Yes, of course, Ruwac is growing, we're always on the lookout for good trainees and they've both certainly made a good choice. We are always looking for young people with talent!"
Good reasons for a “Ruwac”

- Superb soundproofing
- Dust-free emptying with different collection systems
- Ruwac’s patented foot bar emptying mechanism
- Additional filter
- Pocket filter
- Long-life motors and blowers
- GFP housing
Good reasons for a “Ruwac”

**Modular system**

**Drives**
- AC single-phase drive
- AC three-phase drive
- Side-channel blower, direct drive
- Compressed air injector

**Dedusting**
- Manual deduster
- Compressed air deduster
- Deduster with electric motor

**Special filter**
- Demister mat
- H - residual dust filter
- Active carbon filter

**Main filter**
- Pocket filter, small
- Pocket filter, large
- Oil mist cartridge
- Filter cartridges

**Trolley frames**
- Trolley with Ø 75/125mm castors, 35 litre dustbin
- Trolley, large chassis, with Ø 200mm castors
- Trolley with pneumatic tyres
- Frame for pre-separator silo